

Arg Thr Val Ala Ile Ile Gly Gly Phe Leu Val Leu Ala Ser Gly Ala
 130 135 140
 Gly Glu Leu Tyr Arg Arg Lys Pro Arg Ser Arg Ser Leu Gln Ser Thr
 145 150 155 160
 Gly Gln Val Phe Leu Gly Ile Tyr Leu Ile Cys Val Ala Tyr Ser Leu
 165 170 175
 Gln His Ser Lys Glu Asp Arg Leu Ala Tyr Leu Asn His Leu Pro Gly
 180 185 190
 Gly Glu Leu Met Ile Gln Leu Phe Phe Val Leu Tyr Gly Ile Leu Ala
 195 200 205
 Leu Ala Phe Leu Ser Gly Tyr Tyr Val Thr Leu Ala Ala Gln Ile Leu
 210 215 220
 Ala Val Leu Leu Pro Pro Val Met Leu Leu Ile Asp Gly Asn Val Ala
 225 230 235 240
 Tyr Trp His Asn Thr Arg Arg Val Glu Phe Trp Asn Gln Met Lys Leu
 245 250 255
 Leu Gly Glu Ser Val Gly Ile Phe Gly Thr Ala Val Ile Leu Ala Thr
 260 265 270

Asp Gly

<210> 272

<211> 203

<212> PRT

<213> Homo sapiens

<400> 272

Met Gln Leu Gly Ser Val Leu Leu Thr Arg Cys Pro Phe Trp Gly Cys
 1 5 10 15
 Phe Ser Gln Leu Met Leu Tyr Ala Glu Arg Ala Glu Ala Arg Arg Lys
 20 25 30
 Pro Asp Ile Pro Val Pro Tyr Leu Tyr Phe Asp Met Gly Ala Ala Val
 35 40 45
 Leu Cys Ala Ser Phe Met Ser Phe Gly Val Lys Arg Arg Trp Phe Ala
 50 55 60
 Leu Gly Ala Ala Leu Gln Leu Ala Ile Ser Thr Tyr Ala Ala Tyr Ile
 65 70 75 80
 Gly Gly Tyr Val His Tyr Gly Asp Trp Leu Lys Val Arg Met Tyr Ser
 85 90 95
 Arg Thr Val Ala Ile Ile Gly Gly Phe Leu Val Leu Ala Ser Gly Ala
 100 105 110
 Gly Glu Leu Tyr Arg Arg Lys Pro Arg Ser Arg Ser Leu Gln Ser Thr

115 120 125
 Gly Gln Val Phe Leu Gly Ile Tyr Leu Ile Cys Val Ala Tyr Ser Leu
 130 135 140
 Gln His Ser Lys Glu Asp Arg Leu Ala Tyr Leu Asn His Leu Pro Gly
 145 150 155 160
 Gly Glu Leu Met Ile Gln Leu Phe Phe Val Leu Tyr Gly Ile Leu Ala
 165 170 175
 Pro Gly Leu Ser Val Arg Leu Leu Arg Asp Pro Arg Cys Pro Asp Pro
 180 185 190
 Gly Cys Thr Ala Ala Pro Cys His Ala Ala His
 195 200

 <210> 273
 <211> 407
 <212> PRT
 <213> Homo sapiens

 <400> 273
 Ser Asn Glu Ile Leu Leu Ser Phe Pro Gln Asn Tyr Tyr Ile Gln Trp
 1 5 10 15
 Leu Asn Gly Ser Leu Ile His Gly Leu Trp Asn Leu Ala Ser Leu Phe
 20 25 30
 Ser Asn Leu Cys Leu Phe Val Leu Met Pro Phe Ala Phe Phe Phe Leu
 35 40 45
 Glu Ser Glu Gly Phe Ala Gly Leu Lys Lys Gly Ile Arg Ala Arg Ile
 50 55 60
 Leu Glu Thr Leu Val Met Leu Leu Leu Leu Ala Leu Leu Ile Leu Gly
 65 70 75 80
 Ile Val Trp Val Ala Ser Ala Leu Ile Asp Asn Asp Ala Ala Ser Met
 85 90 95
 Glu Ser Leu Tyr Asp Leu Trp Glu Phe Tyr Leu Pro Tyr Leu Tyr Ser
 100 105 110
 Cys Ile Ser Leu Met Gly Cys Leu Leu Leu Leu Cys Thr Pro Val
 115 120 125
 Gly Leu Ser Arg Met Phe Thr Val Met Gly His Leu Leu Val Lys Pro
 130 135 140
 Thr Ile Leu Glu Asp Leu Asp Glu Gln Ile Tyr Ile Ile Thr Leu Glu
 145 150 155 160
 Glu Glu Ala Leu Gln Arg Arg Leu Asn Gly Leu Ser Ser Ser Val Glu
 165 170 175
 Tyr Asn Ile Met Glu Leu Glu Gln Glu Leu Glu Asn Val Lys Thr Leu
 180 185 190

Lys Thr Lys Leu Glu Arg Arg Lys Lys Ala Ser Ala Trp Glu Arg Asn
 195 200 205
 Leu Val Tyr Pro Ala Val Met Val Leu Leu Leu Ile Glu Thr Ser Ile
 210 215 220
 Ser Val Leu Leu Val Ala Cys Asn Ile Leu Cys Leu Leu Val Asp Glu
 225 230 235 240
 Thr Ala Met Pro Lys Gly Thr Arg Gly Pro Gly Ile Gly Asn Ala Ser
 245 250 255
 Leu Ser Thr Phe Gly Phe Val Gly Ala Ala Leu Glu Ile Ile Leu Ile
 260 265 270
 Phe Tyr Leu Met Val Ser Ser Val Val Gly Phe Tyr Ser Leu Arg Phe
 275 280 285
 Phe Gly Asn Phe Thr Pro Lys Lys Asp Asp Thr Thr Met Thr Lys Ile
 290 295 300
 Ile Gly Asn Cys Val Ser Ile Leu Val Leu Ser Ser Ala Leu Pro Val
 305 310 315 320
 Met Ser Arg Thr Leu Gly Ile Thr Arg Phe Asp Leu Leu Gly Asp Phe
 325 330 335
 Gly Arg Phe Asn Trp Leu Gly Asn Phe Tyr Ile Val Leu Ser Tyr Asn
 340 345 350
 Leu Leu Phe Ala Ile Val Thr Thr Leu Cys Leu Val Arg Lys Phe Thr
 355 360 365
 Ser Ala Val Arg Glu Glu Leu Phe Lys Ala Leu Gly Leu His Lys Leu
 370 375 380
 His Leu Pro Asn Thr Ser Arg Asp Ser Glu Thr Ala Lys Pro Ser Val
 385 390 395 400
 Asn Gly His Gln Lys Ala Leu
 405

<210> 274

<211> 165

<212> PRT

<213> Homo sapiens

<400> 274

Arg Ser Tyr Met Gln Ser Val Trp Thr Glu Glu Ser Gln Cys Thr Leu
 1 5 10 15
 Leu Asn Ala Ser Ile Thr Glu Thr Phe Asn Cys Ser Phe Ser Cys Gly
 20 25 30
 Pro Asp Cys Trp Lys Leu Ser Gln Tyr Pro Cys Leu Gln Val Tyr Val
 35 40 45

Asn Leu Thr Ser Ser Gly Glu Lys Leu Leu Leu Tyr His Thr Glu Glu
 50 55 60
 Thr Ile Lys Ile Asn Gln Lys Cys Ser Tyr Ile Pro Lys Cys Gly Lys
 65 70 75 80
 Asn Phe Glu Glu Ser Met Ser Leu Val Asn Val Val Met Glu Asn Phe
 85 90 95
 Arg Lys Tyr Gln His Phe Ser Cys Tyr Ser Asp Pro Glu Gly Asn Gln
 100 105 110
 Lys Ser Val Ile Leu Thr Lys Leu Tyr Ser Ser Asn Val Leu Phe His
 115 120 125
 Ser Leu Phe Trp Pro Thr Cys Met Met Ala Gly Gly Val Ala Ile Val
 130 135 140
 Ala Met Val Lys Leu Thr Gln Tyr Leu Ser Leu Leu Cys Glu Arg Ile
 145 150 155 160
 Gln Arg Ile Asn Arg
 165

<210> 275
 <211> 155
 <212> PRT
 <213> Homo sapiens

<400> 275
 Ala Phe Ala His Leu Gln Leu Gly Pro Met Trp Lys Leu Trp Arg Ala
 1 5 10 15
 Glu Glu Gly Ala Ala Ala Leu Gly Gly Ala Leu Phe Leu Leu Leu Phe
 20 25 30
 Ala Leu Gly Val Arg Gln Leu Leu Lys Gln Arg Arg Pro Met Gly Phe
 35 40 45
 Pro Pro Gly Pro Pro Gly Leu Pro Phe Ile Gly Asn Ile Tyr Ser Leu
 50 55 60
 Ala Ala Ser Ser Glu Leu Pro His Val Tyr Met Arg Lys Gln Ser Gln
 65 70 75 80
 Val Tyr Gly Glu Val Gln Pro Arg Arg Ala Pro Gly Arg Glu Gly Arg
 85 90 95
 Gln Ala Gly Pro Gly Trp Pro Gly Pro Ser Trp Leu Asp Leu Trp Pro
 100 105 110
 Pro Leu Gly Arg Leu Val Gly Thr Ser Pro Cys Ala Gly Cys Pro Leu
 115 120 125
 Arg Asp Thr Arg Phe Pro Gly Leu Glu Gly Arg Ser Pro Arg Arg Arg
 130 135 140
 Ala Pro Leu Gln Gly Glu Pro Arg Pro Cys Arg

145

150

155

<210> 276

<211> 42

<212> PRT

<213> Homo sapiens

<400> 276

Met Arg Val Arg Ile Gly Leu Thr Leu Leu Leu Cys Ala Val Leu Leu
 1 5 10 15

Ser Leu Ala Ser Ala Ser Ser Asp Glu Gly Ser Gln Asp Glu Ser
 20 25 30

Leu Gly Phe Gln Asp Tyr Phe Asp Ile Arg
 35 40

<210> 277

<211> 155

<212> PRT

<213> Homo sapiens

<400> 277

Met Ala Arg Gly Ser Leu Arg Arg Leu Leu Arg Leu Leu Val Leu Gly
 1 5 10 15

Leu Trp Leu Ala Leu Leu Arg Ser Val Ala Gly Glu Gln Ala Pro Gly
 20 25 30

Thr Ala Pro Cys Ser Arg Gly Ser Ser Trp Ser Ala Asp Leu Asp Lys
 35 40 45

Cys Met Asp Cys Ser Thr Ser Cys Pro Leu Pro Ala Ala Leu Ala His
 50 55 60

Pro Trp Gly Arg Ser Glu Pro Asp Leu Arg Ala Gly Ala Ala Phe Trp
 65 70 75 80

Leu Phe Gly Leu Glu Thr Met Pro Gln Glu Arg Glu Val His His Pro
 85 90 95

His Arg Gly Asp Arg Arg Arg Gly Leu Pro Ser Cys Gly Ala Asp Pro
 100 105 110

Val Thr Met Cys Pro Leu Pro Ala Gly Ala Arg Pro Leu Ile Ile His
 115 120 125

Ser Ser Ile Leu Glu Pro Val Ser Ala Ser Gln Thr Arg Arg Glu Pro
 130 135 140

Ser Ser Ser Asn His Lys Gly Gly Gly Gly Arg
 145 150 155

<210> 278

<211> 207

<212> PRT

<213> Homo sapiens

<400> 278

Gly Thr Ser Phe Leu Asp Pro Thr Leu Ser Leu Phe Val Leu Glu Lys
 1 5 10 15
 Phe Asn Leu Pro Ala Gly Tyr Val Gly Leu Val Phe Leu Gly Met Ala
 20 25 30
 Leu Ser Tyr Ala Ile Ser Ser Pro Leu Phe Gly Leu Leu Ser Asp Lys
 35 40 45
 Arg Pro Pro Leu Arg Lys Trp Leu Leu Val Phe Gly Asn Leu Ile Thr
 50 55 60
 Ala Gly Cys Tyr Met Leu Leu Gly Pro Val Pro Ile Leu His Ile Lys
 65 70 75 80
 Ser Gln Leu Trp Leu Leu Val Leu Ile Leu Val Val Ser Gly Leu Ser
 85 90 95
 Ala Gly Met Ser Ile Ile Pro Thr Phe Pro Glu Ile Leu Ser Cys Ala
 100 105 110
 His Glu Asn Gly Phe Glu Glu Gly Leu Ser Thr Leu Gly Leu Val Ser
 115 120 125
 Gly Leu Phe Ser Ala Met Trp Ser Ile Gly Ala Phe Met Gly Pro Thr
 130 135 140
 Leu Gly Gly Phe Leu Tyr Glu Lys Ile Gly Phe Glu Trp Ala Ala Ala
 145 150 155 160
 Ile Gln Gly Leu Trp Ala Leu Ile Ser Gly Leu Ala Met Gly Leu Phe
 165 170 175
 Tyr Leu Leu Glu Tyr Ser Arg Arg Lys Arg Ser Lys Ser Gln Asn Ile
 180 185 190
 Leu Ser Thr Glu Glu Glu Arg Thr Thr Leu Leu Pro Asn Glu Thr
 195 200 205

<210> 279

<211> 85

<212> PRT

<213> Homo sapiens

<400> 279

Gly Thr Arg Glu Ala Arg Leu Arg Asp Leu Thr Arg Phe Tyr Asp Lys
 1 5 10 15
 Val Leu Ser Leu His Glu Asp Ser Thr Thr Pro Val Ala Asn Pro Leu
 20 25 30
 Leu Ala Phe Thr Leu Ile Lys Arg Leu Gln Ser Asp Trp Arg Asn Val
 35 40 45
 Val His Ser Leu Glu Ala Ser Glu Asn Ile Arg Ala Leu Lys Asp Gly

50

55

60

Tyr Glu Lys Val Glu Gln Asp Leu Pro Ala Phe Glu Asp Leu Glu Gly
 65 70 75 80

Ala Ala Arg Ala Leu
 85

<210> 280

<211> 7

<212> PRT

<213> Homo sapiens

<400> 280

Ala Leu Met Arg Leu Gln Asp
 1 5

<210> 281

<211> 7

<212> PRT

<213> Homo sapiens

<400> 281

Val Glu Ala Gly Gly Ala Thr
 1 5

<210> 282

<211> 489

<212> PRT

<213> Homo sapiens

<400> 282

Gly Thr Arg Glu Ala Arg Leu Arg Asp Leu Thr Arg Phe Tyr Asp Lys
 1 5 10 15

Val Leu Ser Leu His Glu Asp Ser Thr Thr Pro Val Ala Asn Pro Leu
 20 25 30

Leu Ala Phe Thr Leu Ile Lys Arg Leu Gln Ser Asp Trp Arg Asn Val
 35 40 45

Val His Ser Leu Glu Ala Ser Glu Asn Ile Arg Ala Leu Lys Asp Gly
 50 55 60

Tyr Glu Lys Val Glu Gln Asp Leu Pro Ala Phe Glu Asp Leu Glu Gly
 65 70 75 80

Ala Ala Arg Ala Leu Met Arg Leu Gln Asp Val Tyr Met Leu Asn Val
 85 90 95

Lys Gly Leu Ala Arg Gly Val Phe Gln Arg Val Thr Gly Ser Ala Ile
 100 105 110

Thr Asp Leu Tyr Ser Pro Lys Arg Leu Phe Ser Leu Thr Gly Asp Asp
 115 120 125

Cys Phe Gln Val Gly Lys Val Ala Tyr Asp Met Gly Asp Tyr Tyr His
 130 135 140
 Ala Ile Pro Trp Leu Glu Glu Ala Val Ser Leu Phe Arg Gly Ser Tyr
 145 150 155 160
 Gly Glu Trp Lys Thr Glu Asp Glu Ala Ser Leu Glu Asp Ala Leu Asp
 165 170 175
 His Leu Ala Phe Ala Tyr Phe Arg Ala Gly Asn Val Ser Cys Ala Leu
 180 185 190
 Ser Leu Ser Arg Glu Phe Leu Leu Tyr Ser Pro Asp Asn Lys Arg Met
 195 200 205
 Ala Arg Asn Val Leu Lys Tyr Glu Arg Leu Leu Ala Glu Ser Pro Asn
 210 215 220
 His Val Val Ala Glu Ala Val Ile Gln Arg Pro Asn Ile Pro His Leu
 225 230 235 240
 Gln Thr Arg Asp Thr Tyr Glu Gly Leu Cys Gln Thr Leu Gly Ser Gln
 245 250 255
 Pro Thr Leu Tyr Gln Ile Pro Ser Leu Tyr Cys Ser Tyr Glu Thr Asn
 260 265 270
 Ser Asn Ala Tyr Leu Leu Leu Gln Pro Ile Arg Lys Glu Val Ile His
 275 280 285
 Leu Glu Pro Tyr Ile Ala Leu Tyr His Asp Phe Val Ser Asp Ser Glu
 290 295 300
 Ala Gln Lys Ile Arg Glu Leu Ala Glu Pro Trp Leu Gln Arg Ser Val
 305 310 315 320
 Val Ala Ser Gly Glu Lys Gln Leu Gln Val Glu Tyr Arg Ile Ser Lys
 325 330 335
 Ser Ala Trp Leu Lys Asp Thr Val Asp Leu Lys Leu Val Thr Leu Asn
 340 345 350
 His Arg Ile Ala Ala Leu Thr Gly Leu Asp Val Arg Pro Pro Tyr Ala
 355 360 365
 Glu Tyr Leu Gln Val Val Asn Tyr Gly Ile Gly Gly His Tyr Glu Pro
 370 375 380
 His Phe Asp His Ala Thr Ser Pro Ser Ser Pro Leu Tyr Arg Met Lys
 385 390 395 400
 Ser Gly Asn Arg Val Ala Thr Phe Met Ile Tyr Leu Ser Ser Val Glu
 405 410 415
 Ala Gly Gly Ala Thr Ala Phe Ile Tyr Ala Asn Leu Ser Val Pro Val
 420 425 430
 Val Arg Asn Ala Ala Leu Phe Trp Trp Asn Leu His Arg Ser Gly Glu
 435 440 445

Gly Asp Ser Asp Thr Leu His Ala Gly Cys Pro Val Leu Val Gly Asp
 450 455 460

Lys Trp Val Ala Asn Lys Trp Ile His Glu Tyr Gly Gln Glu Phe Arg
 465 470 475 480

Arg Pro Cys Ser Ser Ser Pro Glu Asp
 485

<210> 283

<211> 136

<212> PRT

<213> Homo sapiens

<400> 283

Ile Gln Pro Ser His Ala Ala Leu Leu His Cys Arg Ser Thr Phe Arg
 1 5 10 15

Lys Thr Glu Cys Leu Asp Pro Trp Trp Val Arg Arg Gln Leu Leu Gly
 20 25 30

Met Ala Gly Ile Gly Gly Leu Gln Lys Met Lys Ala Pro His Thr Gly
 35 40 45

Val Leu His Leu Gly Ser Val Trp Val Phe Leu Gly Pro Phe Leu Leu
 50 55 60

Gly Val Gly Tyr Thr Leu Thr Phe Asn Pro Leu Ser Gly Cys Met Ser
 65 70 75 80

Thr Val Arg Trp Leu Asn Ser Asn Ile Thr Ala Asn Arg Thr Leu Ser
 85 90 95

Arg Ser Val Cys His Val Thr Pro Leu His Arg Ser Leu Ser Pro His
 100 105 110

Asp Gly Glu Tyr Leu Arg Gln Met Leu Leu Asn Ser Ser Ser Arg Ala
 115 120 125

Gly Glu Ala Gly Ser Trp Gly Tyr
 130 135

<210> 284

<211> 86

<212> PRT

<213> Homo sapiens

<400> 284

Cys Ser Ser Pro Pro Gly Arg Leu Pro Trp Cys Trp Thr Ala Pro Arg
 1 5 10 15

Thr Leu Gly Lys His Gly Ser Leu Ile Ser Thr Leu Arg Leu Thr Ala
 20 25 30

Pro Leu His Leu Ala Trp Lys Met Met Leu Ser Arg Lys Ala Leu Phe
 35 40 45

Val Leu Leu Asn Thr Pro Val Leu Phe His Ala Leu Glu Gly Arg Leu
50 55 60

Phe Ser Lys Leu Cys His His Thr Ile Gln Arg Thr Leu Thr Val
65 70 75 80

Pro Lys Phe Arg Ser Ser
85

<210> 285

<211> 75

<212> PRT

<213> Homo sapiens

<400> 285

Arg Ser Pro Thr Ser Arg Val Gln Leu Leu Lys Arg Gln Ser Cys Pro
1 5 10 15

Cys Gln Arg Asn Asp Leu Asn Glu Glu Pro Gln His Phe Thr His Tyr
20 25 30

Ala Ile Tyr Asp Phe Ile Val Lys Gly Ser Cys Phe Cys Asn Gly His
35 40 45

Ala Asp Gln Cys Ile Pro Val His Gly Phe Arg Pro Val Lys Ala Pro
50 55 60

Gly Thr Phe His Met Val His Gly Lys Cys Met
65 70 75

<210> 286

<211> 296

<212> PRT

<213> Homo sapiens

<400> 286

His Asn Thr Ala Gly Ser His Cys Gln His Cys Ala Pro Leu Tyr Asn
1 5 10 15

Asp Arg Pro Trp Glu Ala Ala Asp Gly Lys Thr Gly Ala Pro Asn Glu
20 25 30

Cys Arg Thr Cys Lys Cys Asn Gly His Ala Asp Thr Cys His Phe Asp
35 40 45

Val Asn Val Trp Glu Ala Ser Gly Asn Arg Ser Gly Gly Val Cys Asp
50 55 60

Asp Cys Gln His Asn Thr Glu Gly Gln Tyr Cys Gln Arg Cys Lys Pro
65 70 75 80

Gly Phe Tyr Arg Asp Leu Arg Arg Pro Phe Ser Ala Pro Asp Ala Cys
85 90 95

Lys Pro Cys Ser Cys His Pro Val Gly Ser Ala Val Leu Pro Ala Asn
100 105 110

Ser Val Thr Phe Cys Asp Pro Ser Asn Gly Asp Cys Pro Cys Lys Pro
 115 120 125
 Gly Val Ala Gly Arg Arg Cys Asp Arg Cys Met Val Gly Tyr Trp Gly
 130 135 140
 Phe Gly Asp Tyr Gly Cys Arg Pro Cys Asp Cys Ala Gly Ser Cys Asp
 145 150 155 160
 Pro Ile Thr Gly Asp Cys Ile Ser Ser His Thr Asp Ile Asp Trp Tyr
 165 170 175
 His Glu Val Pro Asp Phe Arg Pro Val His Asn Lys Ser Glu Pro Ala
 180 185 190
 Trp Glu Trp Glu Asp Ala Gln Gly Phe Ser Ala Leu Leu His Ser Gly
 195 200 205
 Lys Cys Glu Cys Lys Glu Gln Thr Leu Gly Asn Ala Lys Ala Phe Cys
 210 215 220
 Gly Met Lys Tyr Ser Tyr Val Leu Lys Ile Lys Ile Leu Ser Ala His
 225 230 235 240
 Asp Lys Gly Thr His Val Glu Val Asn Val Lys Ile Lys Lys Val Leu
 245 250 255
 Lys Ser Thr Lys Leu Lys Ile Phe Arg Gly Lys Ala Asn Ile Ile Ser
 260 265 270
 Arg Ile Met Asp Gly Gln Arg Met His Leu Ser Asn Pro Gln Ser Trp
 275 280 285
 Phe Gly Ile Pro Cys Ser Arg Thr
 290 295

<210> 287

<211> 37

<212> PRT

<213> Homo sapiens

<400> 287

Cys Asp Asp Cys Gln His Asn Thr Glu Gly Gln Tyr Cys Gln Arg Cys
 1 5 10 15

Lys Pro Gly Phe Tyr Arg Asp Leu Arg Arg Pro Phe Ser Ala Pro Asp
 20 25 30

Ala Cys Lys Pro Cys
 35

<210> 288

<211> 36

<212> PRT

<213> Homo sapiens

<400> 288

Cys Pro Cys Lys Pro Gly Val Ala Gly Arg Arg Cys Asp Arg Cys Met
 1 5 10 15

Val Gly Tyr Trp Gly Phe Gly Asp Tyr Gly Cys Arg Pro Cys Asp Cys
 20 25 30

Ala Gly Ser Cys
 35

<210> 289

<211> 66

<212> PRT

<213> Homo sapiens

<400> 289

Asn Ile Ser Ser Gln Tyr Cys Ile Leu Lys Ser Leu Glu Met Met Ile
 1 5 10 15

Ser Gly Leu Lys Leu Leu Val Leu Phe Leu Lys Phe Ala Pro Glu Asn
 20 25 30

Tyr Cys Leu Ser Thr Glu Thr Leu Gln Met Pro Asn Arg His Leu Arg
 35 40 45

Leu Ser Lys Ala Thr Cys Tyr Leu Met Lys Cys Leu Leu Pro Ser Tyr
 50 55 60

Phe Glu
 65

<210> 290

<211> 88

<212> PRT

<213> Homo sapiens

<400> 290

Pro Ile Glu Gly Thr Pro Ala Gly Thr Gly Pro Glu Phe Pro Gly Arg
 1 5 10 15

Pro Thr Arg Pro Gln Arg Met Arg Ser Leu Ile Ser Ser His Pro Cys
 20 25 30

Gln His Leu Leu Leu Leu Leu Leu Leu Phe Leu Ile Leu Ala Ile
 35 40 45

Leu Val Asp Val Lys Trp Tyr Leu Val Leu Phe Ile Cys Ile Ser Leu
 50 55 60

Met Thr Ser Asp Val Glu His Leu Phe Met Cys Leu Leu Ala Ile Arg
 65 70 75 80

Ile Ser Ser Trp Arg Asn Val Tyr
 85

<210> 291

<211> 60
<212> PRT
<213> Homo sapiens

<400> 291
Asn Trp Val Pro Thr Cys Leu Cys Pro Ser Ala Pro Cys Ser Phe His
1 5 10 15
Leu Leu Ser Arg Phe Lys Cys Leu Phe Ser Pro Gln Arg Leu Thr Asp
20 25 30
Ile Phe Arg Arg Tyr Asp Thr Asp Gln Asp Gly Trp Ile Gln Val Ser
35 40 45
Tyr Glu Gln Tyr Leu Ser Met Val Phe Ser Ile Val
50 55 60

<210> 292
<211> 33
<212> PRT
<213> Homo sapiens

<400> 292
Gln Arg Leu Thr Asp Ile Phe Arg Arg Tyr Asp Thr Asp Gln Asp Gly
1 5 10 15
Trp Ile Gln Val Ser Tyr Glu Gln Tyr Leu Ser Met Val Phe Ser Ile
20 25 30
Val

<210> 293
<211> 73
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (54)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (68)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 293

Met Phe Tyr Lys Leu Thr Leu Ile Leu Cys Glu Leu Ser Val Ala Gly
 1 5 10 15

Val Thr Gln Ala Ala Ser Gln Arg Pro Leu Gln Arg Leu Pro Arg His
 20 25 30

Ile Cys Ser Gln Arg Xaa Pro Pro Gly Arg Cys Leu Leu Lys Ala Xaa
 35 40 45

Leu Gln Thr Thr Trp Xaa Xaa Pro Asp Lys Pro Ile Pro Arg Leu Ser
 50 55 60

Pro Pro Leu Xaa Ser Asp Pro Lys Arg
 65 70

<210> 294

<211> 95

<212> PRT

<213> Homo sapiens

<400> 294

Thr Ser Ser Pro Val Phe Ser Phe Cys Ser Met Ala Val Arg Glu Pro
 1 5 10 15

Asp His Leu Gln Arg Val Ser Leu Pro Arg Tyr Asn Val Ser Ala Ser
 20 25 30

Leu Gln Trp Leu Pro Cys His Arg Ile Val Leu Gln Pro Trp His Met
 35 40 45

Cys Ala Met Trp Glu Leu Gly Gln Val Leu Phe His Pro Val Ala Pro
 50 55 60

Arg Glu Gly Ala Ala Pro Ser Pro Val Ser Thr Leu Thr Trp Pro Ser
 65 70 75 80

Ser Cys Ser His Ser Glu Ser Thr Met Glu Leu Glu Leu Gln Phe
 85 90 95

<210> 295

<211> 16

<212> PRT

<213> Homo sapiens

<400> 295

Met Ala Val Arg Glu Pro Asp His Leu Gln Arg Val Ser Leu Pro Arg
 1 5 10 15

<210> 296
 <211> 7
 <212> PRT
 <213> Homo sapiens

<400> 296
 Leu Pro Cys His Arg Ile Val
 1 5

<210> 297
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 297
 Ser Leu Gln Trp Leu Pro Cys His Arg Ile Val Leu Gln Pro Trp
 1 5 10 15

<210> 298
 <211> 454
 <212> PRT
 <213> Homo sapiens

<400> 298
 Cys Phe Lys Arg Lys Pro Lys Arg Glu His Cys Ser Cys Pro Ile Thr
 1 5 10 15
 Tyr Gln Ser Leu Gly Asp Ile Leu Asn Ala Ser Phe Phe Ser Lys Arg
 20 25 30
 Lys Gly Met Gln Glu Val Lys Leu Asn Ser Tyr Val Val Ser Gly Thr
 35 40 45
 Ile Gly Leu Lys Glu Lys Ile Ser Leu Ser Glu Pro Val Phe Leu Thr
 50 55 60
 Phe Arg His Asn Gln Pro Gly Asp Lys Arg Thr Lys His Ile Cys Val
 65 70 75 80
 Tyr Trp Glu Gly Ser Glu Gly Gly Arg Trp Ser Thr Glu Gly Cys Ser
 85 90 95
 His Val His Ser Asn Gly Ser Tyr Thr Lys Cys Lys Cys Phe His Leu
 100 105 110
 Ser Ser Phe Ala Val Leu Val Ala Leu Ala Pro Lys Glu Asp Pro Val
 115 120 125
 Leu Thr Val Ile Thr Gln Val Gly Leu Thr Ile Ser Leu Leu Cys Leu
 130 135 140
 Phe Leu Ala Ile Leu Thr Phe Leu Leu Cys Arg Pro Ile Gln Asn Thr
 145 150 155 160
 Ser Thr Ser Leu His Leu Glu Leu Ser Leu Cys Leu Phe Leu Ala His
 165 170 175

Leu Leu Phe Leu Thr Gly Ile Asn Arg Thr Glu Pro Glu Val Leu Cys
 180 185 190
 Ser Ile Ile Ala Gly Leu Leu His Phe Leu Tyr Leu Ala Cys Phe Thr
 195 200 205
 Trp Met Leu Leu Glu Gly Leu His Leu Phe Leu Thr Val Arg Asn Leu
 210 215 220
 Lys Val Ala Asn Tyr Thr Ser Thr Gly Arg Phe Lys Lys Arg Phe Met
 225 230 235 240
 Tyr Pro Val Gly Tyr Gly Ile Pro Ala Val Ile Ile Ala Val Ser Ala
 245 250 255
 Ile Val Gly Pro Gln Asn Tyr Gly Thr Phe Thr His Cys Trp Leu Lys
 260 265 270
 Leu Asp Lys Gly Phe Ile Trp Ser Phe Met Gly Pro Val Ala Val Ile
 275 280 285
 Ile Leu Ile Asn Leu Val Phe Tyr Phe Gln Val Leu Trp Ile Leu Arg
 290 295 300
 Ser Lys Leu Ser Ser Leu Asn Lys Glu Val Ser Thr Ile Gln Asp Thr
 305 310 315 320
 Arg Val Met Thr Phe Lys Ala Ile Ser Gln Leu Phe Ile Leu Gly Cys
 325 330 335
 Ser Trp Gly Leu Gly Phe Phe Met Val Glu Glu Val Gly Lys Thr Ile
 340 345 350
 Gly Ser Ile Ile Ala Tyr Ser Phe Thr Ile Ile Asn Thr Leu Gln Gly
 355 360 365
 Val Leu Leu Phe Val Val His Cys Leu Leu Asn Arg Gln Val Arg Met
 370 375 380
 Glu Tyr Lys Lys Trp Phe Ser Gly Met Arg Lys Gly Val Glu Thr Glu
 385 390 395 400
 Ser Thr Glu Met Ser Arg Ser Thr Thr Gln Thr Lys Thr Glu Glu Val
 405 410 415
 Gly Lys Ser Ser Glu Ile Phe His Lys Gly Gly Thr Ala Ser Ser Ser
 420 425 430
 Ala Glu Ser Thr Lys Gln Pro Gln Pro Gln Val His Leu Val Ser Ala
 435 440 445
 Ala Trp Leu Lys Met Asn
 450

<210> 299

<211> 101

<212> PRT

<213> Homo sapiens

<400> 299

Phe Phe Trp Lys Glu Asn Leu Arg Arg Asn Gly Ser Arg Glu Asp Phe
1 5 10 15
Ala Arg Arg Ala Thr Gln Leu Ile Gln Ser Val Glu Leu Ser Ile Trp
20 25 30
Asn Ala Ser Phe Ala Ser Pro Gly Lys Gly Gln Ile Ser Glu Phe Asp
35 40 45
Ile Val Tyr Glu Thr Lys Arg Cys Asn Glu Thr Arg Glu Asn Ala Phe
50 55 60
Leu Glu Ala Gly Asn Asn Thr Met Asp Ile Asn Cys Ala Asp Ala Leu
65 70 75 80
Lys Gly Asn Leu Arg Glu Ser Thr Ala Val Ala Leu Ser Leu Ile Asn
85 90 95
Leu Leu Gly Ile Phe
100

<210> 300

<211> 27

<212> PRT

<213> Homo sapiens

<400> 300

Asp Ile Asn Glu Cys Glu Thr Gly Leu Ala Lys Cys Lys Tyr Lys Ala
1 5 10 15
Tyr Cys Arg Asn Lys Val Gly Gly Tyr Ile Cys
20 25

<210> 301

<211> 12

<212> PRT

<213> Homo sapiens

<400> 301

Cys Arg Asn Lys Val Gly Gly Tyr Ile Cys Ser Cys
1 5 10

<210> 302

<211> 331

<212> PRT

<213> Homo sapiens

<400> 302

Ala Leu Cys Pro His Pro His Leu Ile Leu Asn Val Thr Val Ser Pro
1 5 10 15
Ala Pro Ser Cys Arg His Val Lys Lys Val Val Ala Ser Pro Ser Pro
20 25 30

Ser Thr Thr Met Ile Ala Met Asp Ala Pro His Ser Lys Ala Ala Leu
 35 40 45
 Asp Ser Ile Asn Glu Leu Pro Glu Asn Ile Leu Leu Glu Leu Phe Thr
 50 55 60
 His Val Pro Ala Arg Gln Leu Leu Leu Asn Cys Arg Leu Val Cys Ser
 65 70 75 80
 Leu Trp Arg Asp Leu Ile Asp Leu Met Thr Leu Trp Lys Arg Lys Cys
 85 90 95
 Leu Arg Glu Gly Phe Ile Thr Lys Asp Trp Asp Gln Pro Val Ala Asp
 100 105 110
 Trp Lys Ile Phe Tyr Phe Leu Arg Ser Leu His Arg Asn Leu Leu Arg
 115 120 125
 Asn Pro Cys Ala Glu Glu Asp Met Phe Ala Trp Gln Ile Asp Phe Asn
 130 135 140
 Gly Gly Asp Arg Trp Lys Val Glu Ser Leu Pro Gly Ala His Gly Thr
 145 150 155 160
 Asp Phe Pro Asp Pro Lys Val Lys Lys Tyr Phe Val Thr Ser Tyr Glu
 165 170 175
 Met Cys Leu Lys Ser Gln Leu Val Asp Leu Val Ala Glu Gly Tyr Trp
 180 185 190
 Glu Glu Leu Leu Asp Thr Phe Arg Pro Asp Ile Val Val Lys Asp Trp
 195 200 205
 Phe Ala Ala Arg Ala Asp Cys Gly Cys Thr Tyr Gln Leu Lys Val Gln
 210 215 220
 Leu Ala Ser Ala Asp Tyr Phe Val Leu Ala Ser Phe Glu Pro Pro Pro
 225 230 235 240
 Val Thr Ile Gln Gln Trp Asn Asn Ala Thr Trp Thr Glu Val Ser Tyr
 245 250 255
 Thr Phe Ser Asp Tyr Pro Arg Gly Val Arg Tyr Ile Leu Phe Gln His
 260 265 270
 Gly Gly Arg Asp Thr Gln Tyr Trp Ala Gly Trp Tyr Gly Pro Arg Val
 275 280 285
 Thr Asn Ser Ser Ile Val Val Ser Pro Lys Met Thr Arg Asn Gln Ala
 290 295 300
 Ser Ser Glu Ala Gln Pro Gly Gln Lys His Gly Gln Glu Glu Ala Ala
 305 310 315 320
 Gln Ser Pro Tyr Arg Ala Val Val Gln Ile Phe
 325 330

201

<210> 303

<211> 328

<212> PRT

<213> Homo sapiens

<400> 303

Arg Gln Arg Ser Trp Asn Pro Gly Thr Asn Cys Tyr His Pro Asn Met
 1 5 10 15

Pro Asp Ala Phe Leu Thr Cys Glu Thr Val Ile Phe Ala Trp Ala Ile
 20 25 30

Gly Gly Glu Gly Phe Ser Tyr Pro Pro His Val Gly Leu Ser Leu Gly
 35 40 45

Thr Pro Leu Asp Pro His Tyr Val Leu Leu Glu Val His Tyr Asp Asn
 50 55 60

Pro Thr Tyr Glu Glu Gly Leu Ile Asp Asn Ser Gly Leu Arg Leu Phe
 65 70 75 80

Tyr Thr Met Asp Ile Arg Lys Tyr Asp Ala Gly Val Ile Glu Ala Gly
 85 90 95

Leu Trp Val Ser Leu Phe His Thr Ile Pro Pro Gly Met Pro Glu Phe
 100 105 110

Gln Ser Glu Gly His Cys Thr Leu Glu Cys Leu Glu Glu Ala Leu Glu
 115 120 125

Ala Glu Lys Pro Ser Gly Ile His Val Phe Ala Val Leu Leu His Ala
 130 135 140

His Leu Ala Gly Arg Gly Ile Arg Leu Arg His Phe Arg Lys Gly Lys
 145 150 155 160

Glu Met Lys Leu Leu Ala Tyr Asp Asp Asp Phe Asp Phe Asn Phe Gln
 165 170 175

Glu Phe Gln Tyr Leu Lys Glu Glu Gln Thr Ile Leu Pro Gly Asp Asn
 180 185 190

Leu Ile Thr Glu Cys Arg Tyr Asn Thr Lys Asp Arg Ala Glu Met Thr
 195 200 205

Trp Gly Gly Leu Ser Thr Arg Ser Glu Met Cys Leu Ser Tyr Leu Leu
 210 215 220

Tyr Tyr Pro Arg Ile Asn Leu Thr Arg Cys Ala Ser Ile Pro Asp Ile
 225 230 235 240

Met Glu Gln Leu Gln Phe Ile Gly Val Lys Glu Ile Tyr Arg Pro Val
 245 250 255

Thr Thr Trp Pro Phe Ile Ile Lys Ser Pro Lys Gln Tyr Lys Asn Leu
 260 265 270

Ser Phe Met Asp Ala Met Asn Lys Phe Lys Trp Thr Lys Lys Glu Gly
 275 280 285

Leu Ser Phe Asn Lys Leu Val Leu Ser Leu Pro Val Asn Val Arg Cys
 290 295 300

Ser Lys Thr Asp Asn Ala Glu Trp Ser Ile Pro Arg Asn Asp Ser Ile
 305 310 315 320

Thr Ser Arg Tyr Arg Lys Thr Leu
 325

<210> 304

<211> 272

<212> PRT

<213> Homo sapiens

<400> 304

Met Cys Cys Trp Pro Leu Leu Leu Leu Trp Gly Leu Leu Pro Gly Thr
 1 5 10 15

Ala Ala Gly Gly Ser Gly Arg Thr Tyr Pro His Arg Thr Leu Leu Asp
 20 25 30

Ser Glu Gly Lys Tyr Trp Leu Gly Trp Ser Gln Arg Gly Ser Gln Ile
 35 40 45

Ala Phe Arg Leu Gln Val Arg Thr Ala Gly Tyr Val Gly Phe Gly Phe
 50 55 60

Ser Pro Thr Gly Ala Met Ala Ser Ala Asp Ile Val Val Gly Gly Val
 65 70 75 80

Ala His Gly Arg Pro Tyr Leu Gln Asp Tyr Phe Thr Asn Ala Asn Arg
 85 90 95

Glu Leu Lys Lys Asp Ala Gln Gln Asp Tyr His Leu Glu Tyr Ala Met
 100 105 110

Glu Asn Ser Thr His Thr Ile Ile Glu Phe Thr Arg Glu Leu His Thr
 115 120 125

Cys Asp Ile Asn Asp Lys Ser Ile Thr Asp Ser Thr Val Arg Val Ile
 130 135 140

Trp Ala Tyr His His Glu Asp Ala Gly Glu Ala Gly Pro Lys Tyr His
 145 150 155 160

Asp Ser Asn Arg Gly Thr Lys Ser Leu Arg Leu Leu Asn Pro Glu Lys
 165 170 175

Thr Ser Val Leu Ser Thr Ala Leu Pro Tyr Phe Asp Leu Val Asn Gln
 180 185 190

Asp Val Pro Ile Pro Asn Lys Asp Thr Thr Tyr Trp Cys Gln Met Phe
 195 200 205

Lys Ile Pro Val Phe Gln Glu Lys His His Val Ile Lys Val Glu Pro
 210 215 220

Val Ile Gln Arg Gly His Glu Ser Leu Val His His Ile Leu Leu Tyr
 225 230 235 240
 Gln Cys Ser Asn Asn Phe Asn Asp Ser Val Pro Gly Ile Arg Ala Arg
 245 250 255
 Ile Ala Ile Thr Pro Thr Cys Pro Met His Ser Ser Pro Val Lys Leu
 260 265 270

<210> 305
 <211> 207
 <212> PRT
 <213> Homo sapiens

<400> 305
 Thr Gly Thr Phe Trp Ser Pro Arg Ser Gln Arg Arg Gly Cys Cys Gly
 1 5 10 15
 Arg Arg Ala Pro Arg Pro Glu Ala Met Glu Asn Gly Ala Val Tyr Ser
 20 25 30
 Pro Thr Thr Glu Glu Asp Pro Gly Pro Ala Arg Gly Pro Arg Ser Gly
 35 40 45
 Leu Ala Ala Tyr Phe Phe Met Gly Arg Leu Pro Leu Leu Arg Arg Val
 50 55 60
 Leu Lys Gly Leu Gln Leu Leu Ser Leu Leu Ala Phe Ile Cys Glu
 65 70 75 80
 Glu Val Val Ser Gln Cys Thr Leu Cys Gly Gly Leu Tyr Phe Phe Glu
 85 90 95
 Phe Val Ser Cys Ser Ala Phe Leu Leu Ser Leu Leu Ile Leu Ile Val
 100 105 110
 Tyr Cys Thr Pro Phe Tyr Glu Arg Val Asp Thr Thr Lys Val Lys Ser
 115 120 125
 Ser Asp Phe Tyr Ile Thr Leu Gly Thr Gly Cys Val Phe Leu Leu Ala
 130 135 140
 Ser Ile Ile Phe Val Ser Thr His Asp Arg Thr Ser Ala Glu Ile Ala
 145 150 155 160
 Ala Ile Val Phe Gly Phe Ile Ala Ser Phe Met Phe Leu Leu Asp Phe
 165 170 175
 Ile Thr Met Leu Tyr Glu Lys Arg Gln Glu Ser Gln Leu Arg Lys Pro
 180 185 190
 Glu Asn Thr Thr Arg Ala Glu Ala Leu Thr Glu Pro Leu Asn Ala
 195 200 205

204

<210> 306
 <211> 135
 <212> PRT
 <213> Homo sapiens

<400> 306
 Ala Ser Ala Pro Arg Val Met Arg Gly His Leu Ala Gly Phe Pro Ala
 1 5 10 15
 Leu Ser Gly Leu Ala Ser Val Cys Leu Trp Ala Thr Phe Ser Ala Gln
 20 25 30
 Leu Pro Gly Pro Val Ala Ala Thr Ser Trp Thr Pro Ala Pro Leu Gly
 35 40 45
 Cys Ser Ala Ala Arg Ser Gly Pro Glu Lys Arg Leu Gly Thr Ala Ala
 50 55 60
 Pro Gly Ser Ala Ala Ser Leu Ala Gln Ala Gly Pro Gly Ala Pro Cys
 65 70 75 80
 Arg Val Leu Pro Val Asp Pro Ala Pro Ala Ala Leu Asn Val Arg Glu
 85 90 95
 Pro Gly Trp Leu Gly Gly Leu Phe Asp Gly Ala Leu Leu Gln Val Leu
 100 105 110
 Leu Asn Phe Leu Arg Lys Ser Thr Asp Val Leu Met Asp Thr Arg Glu
 115 120 125
 Ala Glu Ser Leu Glu Val Glu
 130 135

<210> 307
 <211> 188
 <212> PRT
 <213> Homo sapiens

<400> 307
 Asn Lys Leu His Ser Phe Pro Val Phe Leu Ser Gln Leu Leu Leu Asp
 1 5 10 15
 Arg Gln Leu Leu His Ala Pro Gln Thr Leu Pro Thr Pro His Cys Gly
 20 25 30
 Gly Ser Ser Arg Pro Gly Pro Ser His Pro Pro Trp Leu Leu Ile Gln
 35 40 45
 Leu Pro Cys Val His Val Ala Leu Trp Gln Met Leu Arg Asp Phe Ser
 50 55 60
 Asp Ser Arg Ile Thr Pro Ser Thr Leu Thr Thr Gln Pro Ala Ala Gln
 65 70 75 80
 Thr Ala Ala Pro Ala Lys Asp Gln Glu Ser Asp Ile Val Gly Gly Glu
 85 90 95
 Gly Ile Leu Cys Asp Ile Ala Phe Leu Gln Glu Asp His Pro Leu Gly

<210> 311
 <211> 313
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (117)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 311
 Met Thr Phe Gly Ser Thr Ile Ser Pro Thr Ser Thr His Ala Ser Pro
 1 5 10 15
 Ser Leu Gly Phe Cys Cys Ser Trp Leu Leu Glu Asp Leu Glu Glu Gln
 20 25 30
 Leu Tyr Cys Ser Ala Phe Glu Glu Ala Ala Leu Thr Arg Arg Ile Cys
 35 40 45
 Asn Pro Thr Ser Cys Trp Leu Pro Leu Asp Met Glu Leu Leu His Arg
 50 55 60
 Gln Val Leu Ala Leu Gln Thr Gln Arg Val Leu Leu Gly Met Trp Leu
 65 70 75 80
 Arg Arg Ala Trp Asp Thr Trp Val Ser Pro Arg Arg Val Ala Pro Gly
 85 90 95
 Ser Arg Cys Leu Leu Thr Ala Ser His Pro Cys Thr Glu Lys Arg Arg
 100 105 110
 Lys Ala Ser Ala Xaa Gln Arg Asn Leu Gly Tyr Pro Leu Ala Met Leu
 115 120 125
 Cys Leu Leu Val Leu Thr Gly Leu Ser Val Leu Ile Val Ala Ile His
 130 135 140
 Ile Leu Glu Leu Leu Ile Asp Glu Ala Ala Met Pro Arg Gly Met Gln
 145 150 155 160
 Gly Thr Ser Leu Gly Gln Val Ser Phe Ser Lys Leu Gly Ser Phe Gly
 165 170 175
 Ala Val Ile Gln Val Val Leu Ile Phe Tyr Leu Met Val Ser Ser Val
 180 185 190
 Val Gly Phe Tyr Ser Ser Pro Leu Phe Arg Ser Leu Arg Pro Arg Trp
 195 200 205
 His Asp Thr Ala Met Thr Gln Ile Ile Gly Asn Cys Val Cys Leu Leu
 210 215 220
 Val Leu Ser Ser Ala Leu Pro Val Phe Ser Arg Thr Leu Gly Leu Thr
 225 230 235 240
 Arg Phe Asp Leu Leu Gly Asp Phe Gly Arg Phe Asn Trp Leu Gly Asn
 245 250 255

Phe Tyr Ile Val Phe Leu Tyr Asn Ala Ala Phe Ala Gly Leu Thr Thr
260 265 270

Leu Cys Leu Val Lys Thr Phe Thr Ala Ala Val Arg Ala Glu Leu Ile
275 280 285

Arg Ala Phe Gly Leu Asp Arg Leu Pro Leu Pro Val Ser Gly Phe Pro
290 295 300

Gln Ala Ser Arg Lys Thr Gln His Gln
305 310

<210> 312

<211> 92

<212> PRT

<213> Homo sapiens

<400> 312

Leu Cys Val Cys Leu Val Tyr Leu Cys Met Tyr Gly Val Cys Leu Cys
1 5 10 15

Val Ile Val Cys Val Ser Gly Val Ser Leu Cys Leu Tyr Val Trp Gly
20 25 30

Val Ser Val Cys Asp Cys Val Ser Val Phe Met Cys Val Cys Leu Cys
35 40 45

Val Ile Phe Cys Val Tyr Gly Lys Pro Arg Thr Glu His Tyr His Ser
50 55 60

Pro His Leu Ala Lys Gln Lys Ala Phe Arg Glu Met Cys Gly Arg His
65 70 75 80

Asp Val Ser Ala Ala Gly Ile Phe Gln Ser Tyr Val
85 90

<210> 313

<211> 207

<212> PRT

<213> Homo sapiens

<400> 313

Gly His Met Pro Tyr Gly Trp Leu Thr Glu Ile Arg Ala Val Tyr Pro
1 5 10 15

Ala Phe Asp Lys Asn Asn Pro Ser Asn Lys Leu Val Ser Thr Ser Asn
20 25 30

Thr Val Thr Ala Ala His Ile Lys Lys Phe Thr Phe Val Cys Met Ala
35 40 45

Leu Ser Leu Thr Leu Cys Phe Val Met Phe Trp Thr Pro Asn Val Ser
50 55 60

Glu Lys Ile Leu Ile Asp Ile Ile Gly Val Asp Phe Ala Phe Ala Glu
65 70 75 80

Leu Cys Val Val Pro Leu Arg Ile Phe Ser Phe Phe Pro Val Pro Val
 85 90 95
 Thr Val Arg Ala His Leu Thr Gly Trp Leu Met Thr Leu Lys Lys Thr
 100 105 110
 Phe Val Leu Ala Pro Ser Ser Val Leu Arg Ile Ile Val Leu Ile Ala
 115 120 125
 Ser Leu Val Val Leu Pro Tyr Leu Gly Val His Gly Ala Thr Leu Gly
 130 135 140
 Val Gly Ser Leu Leu Ala Gly Phe Val Gly Glu Ser Thr Met Val Ala
 145 150 155 160
 Ile Ala Ala Cys Tyr Val Tyr Arg Lys Gln Lys Lys Lys Met Glu Asn
 165 170 175
 Glu Ser Ala Thr Glu Gly Glu Asp Ser Ala Met Thr Asp Met Pro Pro
 180 185 190
 Thr Glu Glu Val Thr Asp Ile Val Glu Met Arg Glu Glu Asn Glu
 195 200 205

<210> 314
 <211> 114
 <212> PRT
 <213> Homo sapiens

<400> 314
 Gln Val Val Phe Val Ala Ile Leu Leu His Ser His Leu Glu Cys Arg
 1 5 10 15
 Glu Pro Leu Leu Ile Pro Ile Leu Ser Leu Tyr Met Gly Ala Leu Val
 20 25 30
 Arg Cys Thr Thr Leu Cys Leu Gly Tyr Tyr Lys Asn Ile His Asp Ile
 35 40 45
 Ile Pro Asp Arg Ser Gly Pro Glu Leu Gly Gly Asp Ala Thr Ile Arg
 50 55 60
 Lys Met Leu Ser Phe Trp Trp Pro Leu Ala Leu Ile Leu Ala Thr Gln
 65 70 75 80
 Arg Ile Ser Arg Pro Ile Val Asn Leu Phe Val Ser Arg Asp Leu Gly
 85 90 95
 Gly Ser Ser Ala Ala Thr Glu Ala Val Ala Ile Leu Thr Ala Thr Tyr
 100 105 110
 Pro Val

<210> 315
 <211> 115

<212> PRT

<213> Homo sapiens

<400> 315

Arg Cys Cys Cys Arg Gly Cys Ser Cys Arg Ala Arg Leu Cys Pro Pro
 1 5 10 15

Ala Arg Ser Thr Ala Val Ala Pro Glu Cys Arg Gly Ala His Pro Ser
 20 25 30

Arg Ala Met Arg Pro Gly Thr Ala Leu Gln Ala Val Leu Leu Ala Val
 35 40 45

Leu Leu Val Gly Leu Arg Ala Ala Thr Gly Arg Leu Leu Ser Gly Gln
 50 55 60

Pro Val Cys Arg Gly Gly Thr Gln Arg Pro Cys Tyr Lys Val Ile Tyr
 65 70 75 80

Phe His Asp Thr Ser Arg Arg Leu Asn Phe Glu Glu Ala Lys Glu Ala
 85 90 95

Cys Arg Arg Gly Trp Arg Pro Ala Ser Gln His Arg Val Leu Lys Met
 100 105 110

Asn Arg Asn
 115

<210> 316

<211> 81

<212> PRT

<213> Homo sapiens

<400> 316

Met Arg Pro Gly Thr Ala Leu Gln Ala Val Leu Leu Ala Val Leu Leu
 1 5 10 15

Val Gly Leu Arg Ala Ala Thr Gly Arg Leu Leu Ser Gly Gln Pro Val
 20 25 30

Cys Arg Gly Gly Thr Gln Arg Pro Cys Tyr Lys Val Ile Tyr Phe His
 35 40 45

Asp Thr Ser Arg Arg Leu Asn Phe Glu Glu Ala Lys Glu Ala Cys Arg
 50 55 60

Arg Gly Trp Arg Pro Ala Ser Gln His Arg Val Leu Lys Met Asn Arg
 65 70 75 80

Asn

<210> 317

<211> 290

<212> PRT

<213> Homo sapiens

<400> 317
 Ile Arg His Glu Gln Gln Gly Glu Glu Asp Asp Glu His Ala Arg Pro
 1 5 10 15
 Leu Ala Glu Ser Leu Leu Leu Ala Ile Ala Asp Leu Leu Phe Cys Pro
 20 25 30
 Asp Phe Thr Val Gln Ser His Arg Arg Ser Thr Val Asp Ser Ala Glu
 35 40 45
 Asp Val His Ser Leu Asp Ser Cys Glu Tyr Ile Trp Glu Ala Gly Val
 50 55 60
 Gly Phe Ala His Ser Pro Gln Pro Asn Tyr Ile His Asp Met Asn Arg
 65 70 75 80
 Met Glu Leu Leu Lys Leu Leu Leu Thr Cys Phe Ser Glu Ala Met Tyr
 85 90 95
 Leu Pro Pro Ala Pro Glu Ser Gly Ser Thr Asn Pro Trp Val Gln Phe
 100 105 110
 Phe Cys Ser Thr Glu Asn Arg His Ala Leu Pro Leu Phe Thr Ser Leu
 115 120 125
 Leu Asn Thr Val Cys Ala Tyr Asp Pro Val Gly Tyr Gly Ile Pro Tyr
 130 135 140
 Asn His Leu Leu Phe Ser Asp Tyr Arg Glu Pro Leu Val Glu Glu Ala
 145 150 155 160
 Ala Gln Val Leu Ile Val Thr Leu Asp His Asp Ser Ala Ser Ser Ala
 165 170 175
 Ser Pro Thr Val Asp Gly Thr Thr Thr Gly Thr Ala Met Asp Asp Ala
 180 185 190
 Asp Pro Pro Gly Pro Glu Asn Leu Phe Val Asn Tyr Leu Ser Arg Ile
 195 200 205
 His Arg Glu Glu Asp Phe Gln Phe Ile Leu Lys Gly Ile Ala Arg Leu
 210 215 220
 Leu Ser Asn Pro Leu Leu Gln Thr Tyr Leu Pro Asn Ser Thr Lys Lys
 225 230 235 240
 Asp Pro Val Pro Pro Gly Ala Ala Ser Ser Leu Leu Glu Ala Leu Arg
 245 250 255
 Leu Gln Gln Glu Ile Pro Leu Leu Arg Ala Glu Glu Gln Arg Arg Pro
 260 265 270
 Arg His Pro Cys Pro His Pro Leu Leu Pro Gln Arg Cys Pro Gly Arg
 275 280 285
 Ser Val
 290

<210> 318
 <211> 318
 <212> PRT
 <213> Homo sapiens

<400> 318

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Arg Leu Val Tyr Asn Lys Thr Ser Arg Ala Thr Gln Phe Pro Asp Gly
 1             5             10             15

Val Asp Val Arg Val Pro Gly Phe Gly Lys Thr Phe Ser Leu Glu Phe
          20             25             30

Leu Asp Pro Ser Lys Ser Ser Val Gly Ser Tyr Phe His Thr Met Val
          35             40             45

Glu Ser Leu Val Gly Trp Gly Tyr Thr Arg Gly Glu Asp Val Arg Gly
          50             55             60

Ala Pro Tyr Asp Trp Arg Arg Ala Pro Asn Glu Asn Gly Pro Tyr Phe
          65             70             75             80

Leu Ala Leu Arg Glu Met Ile Glu Glu Met Tyr Gln Leu Tyr Gly Gly
          85             90             95

Pro Val Val Leu Val Ala His Ser Met Gly Asn Met Tyr Thr Leu Tyr
          100            105            110

Phe Leu Gln Arg Gln Pro Gln Ala Trp Lys Asp Lys Tyr Ile Arg Ala
          115            120            125

Phe Val Ser Leu Gly Ala Pro Trp Gly Gly Val Ala Lys Thr Leu Arg
          130            135            140

Val Leu Ala Ser Gly Asp Asn Asn Arg Ile Pro Val Ile Gly Pro Leu
          145            150            155            160

Lys Ile Arg Glu Gln Gln Arg Ser Ala Val Ser Thr Ser Trp Leu Leu
          165            170            175

Pro Tyr Asn Tyr Thr Trp Ser Pro Glu Lys Val Phe Val Gln Thr Pro
          180            185            190

Thr Ile Asn Tyr Thr Leu Arg Asp Tyr Arg Lys Phe Phe Gln Asp Ile
          195            200            205

Gly Phe Glu Asp Gly Trp Leu Met Arg Gln Asp Thr Glu Gly Leu Val
          210            215            220

Glu Ala Thr Met Pro Pro Gly Val Gln Leu His Cys Leu Tyr Gly Thr
          225            230            235            240

Gly Val Pro Thr Pro Asp Ser Phe Tyr Tyr Glu Ser Phe Pro Asp Arg
          245            250            255

Asp Pro Lys Ile Cys Phe Gly Asp Gly Asp Gly Thr Val Asn Leu Lys
          260            265            270

Ser Ala Leu Gln Cys Gln Ala Trp Gln Ser Arg Gln Glu His Gln Val
          275            280            285

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Leu Leu Gln Glu Leu Pro Gly Ser Glu His Ile Glu Met Leu Ala Asn
 290 295 300

Ala Thr Thr Leu Ala Tyr Leu Lys Arg Val Leu Leu Gly Pro
 305 310 315

<210> 319

<211> 362

<212> PRT

<213> Homo sapiens

<400> 319

Met Asn Lys Glu Asp Lys Val Trp Asn Asp Cys Lys Gly Val Asn Lys
 1 5 10 15

Leu Thr Asn Leu Glu Glu Gln Tyr Ile Ile Leu Ile Phe Gln Asn Gly
 20 25 30

Leu Asp Pro Pro Ala Asn Met Val Phe Glu Ser Ile Ile Asn Glu Ile
 35 40 45

Gly Ile Lys Asn Asn Ile Ser Asn Phe Phe Ala Lys Ile Pro Phe Glu
 50 55 60

Glu Ala Asn Gly Arg Leu Val Ala Cys Thr Arg Thr Tyr Glu Glu Ser
 65 70 75 80

Ile Lys Gly Ser Cys Gly Gln Lys Glu Asn Lys Ile Lys Thr Val Ser
 85 90 95

Phe Glu Ser Lys Ile Gln Leu Arg Ser Lys Gln Glu Phe Gln Phe Phe
 100 105 110

Asp Glu Glu Glu Glu Thr Gly Glu Asn His Thr Ile Phe Ile Gly Pro
 115 120 125

Val Glu Lys Leu Ile Val Tyr Pro Pro Pro Pro Ala Lys Gly Gly Ile
 130 135 140

Ser Val Thr Asn Glu Asp Leu His Cys Leu Asn Glu Gly Glu Phe Leu
 145 150 155 160

Asn Asp Val Ile Ile Asp Phe Tyr Leu Lys Tyr Leu Val Leu Glu Lys
 165 170 175

Leu Lys Lys Glu Asp Ala Asp Arg Ile His Ile Phe Ser Ser Phe Phe
 180 185 190

Tyr Lys Arg Leu Asn Gln Arg Glu Arg Arg Asn His Glu Thr Thr Asn
 195 200 205

Leu Ser Ile Gln Gln Lys Arg His Gly Arg Val Lys Thr Trp Thr Arg
 210 215 220

His Val Asp Ile Phe Glu Lys Asp Phe Ile Phe Val Pro Leu Asn Glu
 225 230 235 240

Ala Ala His Trp Phe Leu Ala Val Val Cys Phe Pro Gly Leu Glu Lys
245 250 255

Pro Lys Tyr Glu Pro Asn Pro His Tyr His Glu Asn Ala Val Ile Gln
260 265 270

Lys Cys Ser Thr Val Glu Asp Ser Cys Ile Ser Ser Ser Ala Ser Glu
275 280 285

Met Glu Ser Cys Ser Gln Asn Ser Ser Ala Lys Pro Val Ile Lys Lys
290 295 300

Met Leu Asn Lys Lys His Cys Ile Ala Val Ile Asp Ser Asn Pro Gly
305 310 315 320

Gln Glu Glu Ser Asp Pro Arg Tyr Lys Arg Asn Ile Cys Ser Val Lys
325 330 335

Tyr Ser Val Lys Lys Ile Asn His Thr Ala Ser Glu Asn Glu Glu Phe
340 345 350

Asn Lys Gly Glu Ser Thr Ser Gln Lys Ser
355 360

<210> 320

<211> 330

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (38)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (247)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 320

Met Ser Pro Leu Ser Ala Ala Arg Ala Ala Leu Arg Val Tyr Ala Val
1 5 10 15

Gly Ala Ala Val Ile Leu Ala Gln Leu Leu Arg Arg Cys Arg Gly Gly
20 25 30

Phe Leu Glu Pro Val Xaa Pro Pro Arg Pro Asp Arg Val Ala Ile Val
35 40 45

Thr Gly Gly Thr Asp Gly Ile Gly Tyr Ser Thr Ala Asn Ile Trp Arg
50 55 60

Asp Leu Gly Met His Val Ile Ile Ala Gly Asn Asn Asp Ser Lys Ala
65 70 75 80

Lys Gln Val Val Ser Lys Ile Lys Glu Glu Thr Leu Asn Asp Lys Val
85 90 95

Glu Phe Leu Tyr Cys Asp Leu Ala Ser Met Thr Ser Ile Arg Gln Phe
 100 105 110
 Val Gln Lys Phe Lys Met Lys Lys Ile Pro Leu His Val Leu Ile Asn
 115 120 125
 Asn Ala Gly Val Met Met Val Pro Gln Arg Lys Thr Arg Asp Gly Phe
 130 135 140
 Glu Glu His Phe Gly Leu Asn Tyr Leu Gly His Phe Leu Leu Thr Asn
 145 150 155 160
 Leu Leu Leu Asp Thr Leu Lys Glu Ser Gly Ser Pro Gly His Ser Ala
 165 170 175
 Arg Val Val Thr Val Ser Ser Ala Thr His Tyr Val Ala Glu Leu Asn
 180 185 190
 Met Asp Asp Leu Gln Ser Ser Ala Cys Tyr Ser Pro His Ala Ala Tyr
 195 200 205
 Ala Gln Ser Lys Leu Ala Leu Val Leu Phe Thr Tyr His Leu Gln Arg
 210 215 220
 Leu Leu Ala Ala Glu Gly Ser His Val Thr Ala Asn Val Val Asp Pro
 225 230 235 240
 Gly Val Val Asn Thr Asp Xaa Tyr Lys His Val Phe Trp Ala Thr Arg
 245 250 255
 Leu Ala Lys Lys Leu Leu Gly Trp Leu Leu Phe Lys Thr Pro Asp Glu
 260 265 270
 Gly Ala Trp Thr Ser Ile Tyr Ala Ala Val Thr Pro Glu Leu Glu Gly
 275 280 285
 Val Gly Gly Arg Tyr Leu Tyr Asn Glu Lys Glu Thr Lys Ser Leu His
 290 295 300
 Val Thr Tyr Asn Gln Lys Leu Gln Gln Gln Leu Trp Ser Lys Ser Cys
 305 310 315 320
 Glu Met Thr Gly Val Leu Asp Val Thr Leu
 325 330

<210> 321

<211> 71

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (38)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 321

Met Ser Pro Leu Ser Ala Ala Arg Ala Ala Leu Arg Val Tyr Ala Val
 1 5 10 15

Gly Ala Ala Val Ile Leu Ala Gln Leu Leu Arg Arg Cys Arg Gly Gly
 20 25 30

Phe Leu Glu Pro Val Xaa Pro Pro Arg Pro Asp Arg Val Ala Ile Val
 35 40 45

Thr Gly Gly Thr Asp Gly Ile Gly Tyr Ser Thr Ala Asn Ile Trp Arg
 50 55 60

Asp Leu Ala Cys Met Leu Ser
 65 70

<210> 322

<211> 266

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (97)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (174)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (195)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (199)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (206)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 322

Met Glu Val Thr Thr Glu Asp Thr Ser Arg Thr Asp Val Ser Glu Pro
 1 5 10 15

Ala Thr Ser Gly Gly Ala Ala Asp Gly Val Thr Ser Ile Ala Pro Thr
 20 25 30

Ala Val Ala Ser Ser Thr Thr Ala Ala Ser Ile Thr Thr Ala Ala Ser
 35 40 45

Ser Met Thr Val Ala Ser Ser Ala Pro Thr Thr Ala Ala Ser Ser Thr
 50 55 60

Thr Val Ala Ser Ile Ala Pro Thr Thr Thr Ala Ser Ser Met Thr Ala
 65 70 75 80

Ala Ser Ser Thr Pro Met Thr Leu Ala Leu Pro Ala Pro Thr Ser Thr
 85 90 95

Xaa Thr Gly Arg Thr Pro Ser Thr Thr Ala Thr Gly His Pro Ser Leu
 100 105 110

Ser Thr Ala Leu Ala Gln Val Pro Lys Ser Ser Ala Leu Pro Arg Thr
 115 120 125

Ala Thr Leu Ala Thr Leu Ala Thr Arg Ala Gln Thr Val Ala Thr Thr
 130 135 140

Ala Asn Thr Ser Ser Pro Met Ser Thr Arg Pro Ser Pro Ser Lys His
 145 150 155 160

Met Pro Ser Asp Thr Ala Ala Ser Pro Val Pro Pro Met Xaa Pro Gln
 165 170 175

Ala Gln Gly Pro Ile Ser Gln Val Ser Val Asp Gln Pro Val Val Asn
 180 185 190

Thr Thr Xaa Lys Ser Thr Xaa Met Pro Ser Asn Thr Thr Xaa Glu Pro
 195 200 205

Leu Thr Gln Ala Val Val Asp Lys Thr Leu Leu Leu Val Val Leu Leu
 210 215 220

Leu Gly Val Thr Leu Phe Ile Thr Val Leu Val Leu Phe Ala Leu Gln
 225 230 235 240

Ala Tyr Glu Ser Tyr Lys Lys Lys Asp Tyr Thr Gln Val Asp Tyr Leu
 245 250 255

Ile Asn Gly Met Tyr Ala Asp Ser Glu Met
 260 265

<210> 323

<211> 99

<212> PRT

<213> Homo sapiens

<400> 323

Ala Arg Cys Pro Glu Leu Pro Gly Leu Arg Cys Arg Pro Arg Pro Arg
 1 5 10 15

Ala Gly Pro Gln Ala Pro Ser Tyr Cys Pro Arg Ala Thr Arg Pro Pro
 20 25 30

Gly Ala Cys Cys Ala Arg Met Arg Leu Leu Leu Glu Trp Arg Val Tyr
 35 40 45

Leu Arg Leu Thr Cys Ala Thr Lys Asp Gly Met Ala Arg Glu Cys Pro
 50 55 60

Thr Thr Trp Leu Ser Pro Pro Ala Lys Pro Asp Phe Ala Gln Arg His
 65 70 75 80

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<210> 324
<211> 96
<212> PRT
<213> Homo sapiens
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<400> 324
Leu Pro Ala Thr Val Glu Phe Ala Val His Thr Phe Asn Gln Gln Ser
 1             5             10             15

Lys Asp Tyr Tyr Ala Tyr Arg Leu Gly His Ile Leu Asn Ser Trp Lys
          20             25             30

Glu Gln Val Glu Ser Lys Thr Val Phe Ser Met Glu Leu Leu Leu Gly
 35             40             45

Arg Thr Arg Cys Gly Lys Phe Glu Asp Asp Ile Asp Asn Cys His Phe
 50             55             60

Gln Glu Ser Thr Glu Leu Asn Asn Thr Phe Thr Cys Phe Phe Thr Ile
65             70             75             80

Ser Thr Arg Pro Trp Met Thr Gln Phe Ser Leu Leu Asn Lys Thr Cys
          85             90             95

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<210> 325
<211> 166
<212> PRT
<213> Homo sapiens
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<400> 325
Leu Leu Trp Ala Arg Gly Leu Gly Arg Ala Lys Ser Ala Val Pro Thr
  1              5              10              15
Val Ser Thr Met Leu Gly Leu Pro Trp Lys Gly Gly Leu Ser Trp Ala
      20              25              30
Leu Leu Leu Leu Leu Leu Gly Ser Gln Ile Leu Leu Ile Tyr Ala Trp
  35              40              45
His Phe His Glu Gln Arg Asp Cys Asp Glu His Asn Val Met Ala Arg
  50              55              60
Tyr Leu Pro Ala Thr Val Glu Phe Ala Val His Thr Phe Asn Gln Gln
  65              70              75              80
Ser Lys Asp Tyr Tyr Ala Tyr Arg Leu Gly His Ile Leu Asn Ser Trp
      85              90              95

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Lys Glu Gln Val Glu Ser Lys Thr Val Phe Ser Met Glu Leu Leu Leu
 100 105 110
 Gly Arg Thr Arg Cys Gly Lys Phe Glu Asp Asp Ile Asp Asn Cys His
 115 120 125
 Phe Gln Glu Ser Thr Glu Leu Asn Asn Thr Phe Thr Cys Phe Phe Thr
 130 135 140
 Ile Ser Thr Arg Pro Trp Met Thr Gln Phe Ser Leu Leu Asn Lys Thr
 145 150 155 160
 Cys Leu Glu Gly Phe His
 165

<210> 326
 <211> 214
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (200)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (205)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 326
 Leu Glu Gln Lys Leu Glu Leu His Arg Gly Gly Gly Arg Ser Arg Thr
 1 5 10 15
 Ser Gly Ser Pro Gly Leu Gln Glu Phe Gly Thr Arg Glu Glu Arg Gly
 20 25 30
 Glu Gly Glu Gln Arg Thr Gly Arg Glu Phe Ser Gly Asn Gly Gly Arg
 35 40 45
 Ala Val Glu Ala Ala Arg Met Arg Leu Leu Cys Gly Leu Trp Leu Trp
 50 55 60
 Leu Ser Leu Leu Lys Val Leu Gln Ala Gln Thr Pro Thr Pro Leu Pro
 65 70 75 80
 Leu Pro Pro Pro Met Gln Ser Phe Gln Gly Asn Gln Phe Gln Gly Glu
 85 90 95
 Trp Phe Val Leu Gly Leu Ala Gly Asn Ser Phe Arg Pro Glu His Arg
 100 105 110
 Ala Leu Leu Asn Ala Phe Thr Ala Thr Phe Glu Leu Ser Asp Asp Gly
 115 120 125
 Arg Phe Glu Val Trp Asn Ala Met Thr Arg Gly Gln His Cys Asp Thr
 130 135 140

Trp Ser Tyr Val Leu Ile Pro Ala Ala Gln Pro Gly Gln Phe Thr Val
145 150 155 160

Asp His Gly Val Gly Arg Ser Trp Leu Leu Pro Pro Gly Thr Leu Asp
165 170 175

Gln Phe Ile Cys Leu Gly Arg Ala Gln Gly Leu Ser Asp Asp Asn Ile
180 185 190

Val Phe Pro Asp Val Thr Gly Xaa Ala Leu Asp Leu Xaa Ser Leu Pro
195 200 205

Trp Val Ala Ala Pro Ala
210

<210> 327

<211> 181

<212> PRT

<213> Homo sapiens

<400> 327

Met Cys Val Cys Glu Arg Lys Arg Gly Arg Glu Lys Glu Gly Gly Val
1 5 10 15

Thr Pro Thr Met Thr Ser Asn Phe Pro Phe Cys Thr Leu Ile Leu Gly
20 25 30

Ile Ala Gln Ala Gln Ala Cys Pro Gly Cys Pro Gly Asp Trp Pro Gly
35 40 45

Leu Gly Ser Gly Val Gly Glu Gly Leu His His Ile Arg Thr Cys Arg
50 55 60

Thr Pro Ile Pro Cys Ser Pro Pro Ala Pro Ala Ala Ala Cys Leu Gly
65 70 75 80

Ser Gly His Ala Arg Leu Pro Cys Val Leu Arg Leu Trp Pro Val Pro
85 90 95

Ala Asn Leu Ser Ser Pro Phe Arg Leu Glu Ala Leu His Cys Ser Phe
100 105 110

Trp Ser Ser Pro Leu Leu Pro Ala Pro His Leu Ala Phe Phe Gly Phe
115 120 125

Arg Asp Leu Leu Thr Asp Phe Leu Leu Ala Ala Cys Leu Leu Thr Phe
130 135 140

Gln Lys Thr Pro Leu Glu Leu Pro Met Ala Val Val His Leu Leu Val
145 150 155 160

Ala Thr Pro Cys Tyr Gln Met Leu Asp Asn Leu Pro Leu Pro Ser Ala
165 170 175

Ala Ala Asn Trp Cys
180

220

<210> 328
 <211> 195
 <212> PRT
 <213> Homo sapiens

<400> 328
 Tyr Leu Trp Gly Arg Pro Arg Leu Arg Met Arg Ala Gly Thr Ser Pro
 1 5 10 15
 Ser Ala Pro Trp Gly Glu Lys Arg Glu Lys Leu Gly His Lys Leu Pro
 20 25 30
 Val Ala Leu Gln Gly Tyr His Pro Trp Ile Leu Leu Glu Cys Thr Val
 35 40 45
 Phe Trp Ala Arg Val Val Leu Ala Cys Phe Ser Leu Tyr Leu Ile Arg
 50 55 60
 Gly Pro Asn Cys Ile Asn Arg Gln Pro Glu Pro Thr Tyr Gln Lys Ala
 65 70 75 80
 Cys Asn Leu Asp Cys Ser Ser Asp Phe Gly Gln Glu Arg Ala Pro Ala
 85 90 95
 Trp Glu Leu Leu Gly Pro Glu Ser Glu Gln Arg Leu Arg Glu Tyr Thr
 100 105 110
 Ala Gln Gly Leu Gln Ser Leu Ala Ser Ser His Arg Trp Arg Gln Phe
 115 120 125
 Lys Thr Glu Gly Lys Met Arg Gly Gly Ala Ser Pro Leu Pro Trp Leu
 130 135 140
 Ile Cys Phe Trp Leu Cys Ser Tyr Lys Gly Ser Asp Asn Ser Leu Lys
 145 150 155 160
 Pro Val Val Pro Gly Pro Thr Leu Cys Pro Gln Ser Leu Val Ser Pro
 165 170 175
 Ser Val His Pro Ser Thr Arg Ser Ala Ser Leu Gly Arg His Arg Ala
 180 185 190
 Glu Ala Ala
 195

<210> 329
 <211> 50
 <212> PRT
 <213> Homo sapiens

<400> 329
 Met Pro Gly Ile Leu Ala Gly Ile Pro Val Lys Asp Leu Cys Leu Ser
 1 5 10 15
 Leu Leu Gln Gly Phe Arg Leu Leu Leu Leu Cys Val Cys Pro Gly Trp
 20 25 30
 Leu Ser Gly Trp Met Gly Gly Gln Lys Gly Ser Pro Arg Ile Val Asp

35 40 45

Ile Gly
50

<210> 330
<211> 90
<212> PRT
<213> Homo sapiens

<400> 330
Ala Lys Gly Glu Glu Arg Lys Glu Ala Phe Ser Leu Lys Met Val Gln
1 5 10 15
Leu Ser Ser Glu Pro Ile Ser Phe Gly Leu Met Tyr Leu Tyr Leu Gly
20 25 30
Val Phe Phe His Leu Ile Tyr Pro Gly Ala Leu Ser Ile Thr Thr Leu
35 40 45
Gly Lys His Ser His Pro Phe Phe Thr Ala Glu Gln Asn Ser Thr Val
50 55 60
Trp Met Glu His Thr Leu Phe His Gln Ser Pro Val Ala Ser His Leu
65 70 75 80
Val Cys Phe Gln Ser Phe Ala Phe Ser Glu
85 90

<210> 331
<211> 56
<212> PRT
<213> Homo sapiens

<400> 331
Gly Pro Ala His Pro Ala Ser Pro Pro Leu Met Thr Leu Ser Leu Gln
1 5 10 15
Leu Ala Glu Leu Val His Phe Val Cys Ala Phe Gln Ser Gln Trp Thr
20 25 30
Gly Val Tyr Pro Met Met Pro Pro Leu Lys Pro Thr Glu Pro Leu Cys
35 40 45
Phe Ala Cys Val Pro Cys Arg Val
50 55

<210> 332
<211> 18
<212> PRT
<213> Homo sapiens

<400> 332
Met Leu Leu Glu Val Tyr Gly Asp Ser Ile Ser Val Thr Val Ala Ile
1 5 10 15

Pro Leu

<210> 333

<211> 19

<212> PRT

<213> Homo sapiens

<400> 333

Met His Ser Pro Cys Gln Ser Lys Ala Ala Asp Gly Leu Gly Lys Ser
 1 5 10 15

Glu Thr Glu

<210> 334

<211> 10

<212> PRT

<213> Homo sapiens

<400> 334

Met Leu Lys Ser Leu Gly Leu Ser Thr Asn
 1 5 10

<210> 335

<211> 200

<212> PRT

<213> Homo sapiens

<400> 335

Ala Gln Arg Leu Ala Glu Glu Cys Phe Tyr Met Leu Leu Glu Val Tyr
 1 5 10 15

Gly Asp Ser Ile Ser Val Thr Val Ala Ile Pro Leu Met His Ser Pro
 20 25 30

Cys Gln Ser Lys Ala Ala Asp Gly Leu Gly Lys Ser Glu Thr Glu Met
 35 40 45

Leu Lys Ser Leu Gly Leu Ser Thr Asn Met Ser Pro Phe His Leu Leu
 50 55 60

Gly Leu Lys Val Phe Leu Thr Trp Ala Leu Thr Leu Ala Gln Ile Cys
 65 70 75 80

Leu Tyr Phe Phe Glu Val Gln Pro Leu Gly Leu Leu Ala Leu Asn Phe
 85 90 95

Phe Cys Thr Ala Thr Ala Gly Leu Lys Glu Leu Cys Met His Pro Pro
 100 105 110

Ser Leu Ala Phe Thr Pro Glu Phe His Thr Ser Leu Ser Pro Leu Ala
 115 120 125

Ile Pro Ser Phe Cys Gly Thr Ser Val Ser Leu Ser Asn Ser His Thr
 130 135 140

Ile Pro Leu Ser Leu Tyr Leu Pro Phe Pro Ser Lys Ser Arg Met Pro
 145 150 155 160

Asp Thr Leu His Leu Leu Val His Ser Leu Pro Leu Val His Ser Gln
 165 170 175

Val Leu Pro Val Lys Asp Val Thr Ile Glu Trp Pro Leu Cys Gln Arg
 180 185 190

Cys Leu Gly Ser Thr Cys His Gln
 195 200

<210> 336

<211> 99

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (94)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (99)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 336

Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Val Gln Val Ser Leu
 1 5 10 15

Phe Gln Met Phe Cys Phe Ser Ser Ile Phe Cys Ser His Glu His Thr
 20 25 30

His Leu Pro Gly Thr Phe Trp Leu Phe Leu Phe Leu Phe Leu Ile Leu
 35 40 45

Pro Pro Ser Cys Pro Cys Phe Leu Pro Phe Ser Leu Ala Ile Glu Thr
 50 55 60

Val Arg Trp Pro Cys Trp His His Pro Thr Ser Phe Glu Leu Cys Tyr
 65 70 75 80

Pro Gly Thr Ser Ile Tyr Tyr Ala Ser Arg Gly Gly Pro Xaa Pro Asn
 85 90 95

Ser Glu Xaa

<210> 337

<211> 96

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 337

Xaa Asn Xaa Lys Ser Pro Leu Thr Ile Gly Asn Lys Ser Trp Ser Ser
 1 5 10 15

Thr Ala Val Ala Ala Ala Leu Glu Leu Val Asp Pro Pro Gly Cys Arg
 20 25 30

Asn Ser Ala Arg Asp Ser Pro Glu Leu Val His Leu Gly Lys Gly Arg
 35 40 45

Pro Arg Lys Leu Met Thr Tyr Leu Phe Cys Ser Ser Ile Ser Leu Leu
 50 55 60

Leu Leu Lys Val His Ser Ser Gly His Gln Asp Ile Arg Lys Ala Lys
 65 70 75 80

Ser Lys Val Pro Arg Leu Leu Ile Ile Gln Cys Pro Gln Gln Arg Glu
 85 90 95

<210> 338

<211> 54

<212> PRT

<213> Homo sapiens

<400> 338

Gly Pro Glu Glu Asn Leu Ser Pro Ser Thr Pro Ser Gln Met Pro Thr
 1 5 10 15

Ile Trp Val Lys Leu Cys Leu Leu Gln Val Cys His Gly Leu Phe Pro
 20 25 30

Leu Leu Lys His Trp Ser Gln Pro Met Pro Leu Cys Val Thr Leu Ala
 35 40 45

Pro Val Ser Tyr Trp Leu
 50

<210> 339

<211> 287

<212> PRT

<213> Homo sapiens

<400> 339

Pro Arg Val Arg Lys Glu Pro Glu Ala Met Gln Trp Leu Arg Val Arg
 1 5 10 15

225

Glu Ser Pro Gly Glu Ala Thr Gly His Arg Val Thr Met Gly Thr Ala
 20 25 30
 Ala Leu Gly Pro Val Trp Ala Ala Leu Leu Leu Phe Leu Leu Met Cys
 35 40 45
 Glu Ile Pro Met Val Glu Leu Thr Phe Asp Arg Ala Val Ala Ser Asp
 50 55 60
 Cys Gln Arg Cys Cys Asp Ser Glu Asp Pro Leu Asp Pro Ala His Val
 65 70 75 80
 Ser Ser Ala Ser Ser Ser Gly Arg Pro His Ala Leu Pro Glu Ile Arg
 85 90 95
 Pro Tyr Ile Asn Ile Thr Ile Leu Lys Gly Asp Lys Gly Asp Pro Gly
 100 105 110
 Pro Met Gly Leu Pro Gly Tyr Met Gly Arg Glu Gly Pro Gln Gly Glu
 115 120 125
 Pro Gly Pro Gln Gly Ser Lys Gly Asp Lys Gly Glu Met Gly Ser Pro
 130 135 140
 Gly Ala Pro Cys Gln Lys Arg Phe Phe Ala Phe Ser Val Gly Arg Lys
 145 150 155 160
 Thr Ala Leu His Ser Gly Glu Asp Phe Gln Thr Leu Leu Phe Glu Arg
 165 170 175
 Val Phe Val Asn Leu Asp Gly Cys Phe Asp Met Ala Thr Gly Gln Phe
 180 185 190
 Ala Ala Pro Leu Arg Gly Ile Tyr Phe Phe Ser Leu Asn Val His Ser
 195 200 205
 Trp Asn Tyr Lys Glu Thr Tyr Val His Ile Met His Asn Gln Lys Glu
 210 215 220
 Ala Val Ile Leu Tyr Ala Gln Pro Ser Glu Arg Ser Ile Met Gln Ser
 225 230 235 240
 Gln Ser Val Met Leu Asp Leu Ala Tyr Gly Asp Arg Val Trp Val Arg
 245 250 255
 Leu Phe Lys Arg Gln Arg Glu Asn Ala Ile Tyr Ser Asn Asp Phe Asp
 260 265 270
 Thr Tyr Ile Thr Phe Ser Gly His Leu Ile Lys Ala Glu Asp Asp
 275 280 285

<210> 340

<211> 339

<212> PRT

<213> Homo sapiens

<400> 340

Met Leu Tyr Pro Gly Ser Val Tyr Leu Leu Gln Lys Ala Leu Met Pro

226

1	5	10	15
Val Leu Leu Gln Gly Gln Ala Arg Leu Val Glu Glu Cys Asn Gly Arg	20	25	30
Arg Ala Lys Leu Leu Ala Cys Asp Gly Asn Glu Ile Asp Thr Met Phe	35	40	45
Val Asp Arg Arg Gly Thr Ala Glu Pro Gln Gly Gln Lys Leu Val Ile	50	55	60
Cys Cys Glu Gly Asn Ala Gly Phe Tyr Glu Val Gly Cys Val Ser Thr	65	70	75
Pro Leu Glu Ala Gly Tyr Ser Val Leu Gly Trp Asn His Pro Gly Phe	85	90	95
Ala Gly Ser Thr Gly Val Pro Phe Pro Gln Asn Glu Ala Asn Ala Met	100	105	110
Asp Val Val Val Gln Phe Ala Ile His Arg Leu Gly Phe Gln Pro Gln	115	120	125
Asp Ile Ile Ile Tyr Ala Trp Ser Ile Gly Gly Phe Thr Ala Thr Trp	130	135	140
Ala Ala Met Ser Tyr Pro Asp Val Ser Ala Met Ile Leu Asp Ala Ser	145	150	155
Phe Asp Asp Leu Val Pro Leu Ala Leu Lys Val Met Pro Asp Ser Trp	165	170	175
Arg Gly Leu Val Thr Arg Thr Val Arg Gln His Leu Asn Leu Asn Asn	180	185	190
Ala Glu Gln Leu Cys Arg Tyr Gln Gly Pro Val Leu Leu Ile Arg Arg	195	200	205
Thr Lys Asp Glu Ile Ile Thr Thr Thr Val Pro Glu Asp Ile Met Ser	210	215	220
Asn Arg Gly Asn Asp Leu Leu Leu Lys Leu Leu Gln His Arg Tyr Pro	225	230	235
Arg Val Met Ala Glu Glu Gly Leu Arg Val Val Arg Gln Trp Leu Glu	245	250	255
Ala Ser Ser Gln Leu Glu Glu Ala Ser Ile Tyr Ser Arg Trp Glu Val	260	265	270
Glu Glu Asp Trp Cys Leu Ser Val Leu Arg Ser Tyr Gln Ala Glu His	275	280	285
Gly Pro Asp Phe Pro Trp Ser Val Gly Glu Asp Met Ser Ala Asp Gly	290	295	300
Arg Arg Gln Leu Ala Leu Phe Leu Ala Arg Lys His Leu His Asn Phe	305	310	315
			320

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<210> 341
<211> 127
<212> PRT
<213> Homo sapiens
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Val Cys Pro Lys Trp Cys Arg Phe Leu Thr Met Leu Gly His Cys Cys
1 5 10 15

Tyr Phe Trp Gln Val Trp Pro Ala Ser Glu Ala Leu Ala Ala Gly Pro
20 25 30

Thr Pro Ser Thr Gly Ser Ser Ser Pro Ser Trp Lys Gln His Ile Gly
35 40 45

Thr Ser Leu Gln Lys Thr Arg Gly Ser Leu Pro Thr Thr Thr Leu Thr
50 55 60

Ser Gly Ala Gly Gln Ser Thr Ser Thr Gly Lys Asn Pro Ala Ala Gly
65 70 75 80

Arg Ser Leu Glu Gly Ala Leu Pro Ala Gly Val Trp Pro Cys Phe Ala
85 90 95

Gln Ser Pro Cys Thr Gly Gly Gln Gln Thr Pro Ser Ser Thr Gly Leu
100 105 110

Arg Ser Cys Leu Val Arg Ser Pro Ala Thr Trp Trp Arg Thr Pro
115 120 125

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<210> 342
<211> 554
<212> PRT
<213> Homo sapiens
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<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
<221> SITE
<222> (109)
<223> Xaa equals any of the naturally occurring L-amino acids
```

Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Ile Tyr Arg Glu Xaa
1 5 10 15

Asp Ser Glu Arg Ala Pro Ala Ser Val Pro Glu Thr Pro Thr Ala Val
20 25 30

Thr Ala Pro His Ser Ser Ser Trp Asp Thr Tyr Tyr Gln Pro Arg Ala
 35 40 45
 Leu Glu Lys His Ala Asp Ser Ile Leu Ala Leu Ala Ser Val Phe Trp
 50 55 60
 Ser Ile Ser Tyr Tyr Ser Ser Pro Phe Ala Phe Phe Tyr Leu Tyr Arg
 65 70 75 80
 Lys Gly Tyr Leu Ser Leu Ser Lys Val Val Pro Phe Ser His Tyr Ala
 85 90 95
 Gly Thr Leu Leu Leu Leu Leu Ala Gly Val Ala Cys Xaa Arg Gly Ile
 100 105 110
 Gly Arg Trp Thr Asn Pro Gln Tyr Arg Gln Phe Ile Thr Ile Leu Glu
 115 120 125
 Ala Thr His Arg Asn Gln Ser Ser Glu Asn Lys Arg Gln Leu Ala Asn
 130 135 140
 Tyr Asn Phe Asp Phe Arg Ser Trp Pro Val Asp Phe His Trp Glu Glu
 145 150 155 160
 Pro Ser Ser Arg Lys Glu Ser Arg Gly Gly Pro Ser Arg Arg Gly Val
 165 170 175
 Ala Leu Leu Arg Pro Glu Pro Leu His Arg Gly Thr Ala Asp Thr Leu
 180 185 190
 Leu Asn Arg Val Lys Lys Leu Pro Cys Gln Ile Thr Ser Tyr Leu Val
 195 200 205
 Ala His Thr Leu Gly Arg Arg Met Leu Tyr Pro Gly Ser Val Tyr Leu
 210 215 220
 Leu Gln Lys Ala Leu Met Pro Val Leu Leu Gln Gly Gln Ala Arg Leu
 225 230 235 240
 Val Glu Glu Cys Asn Gly Arg Arg Ala Lys Leu Leu Ala Cys Asp Gly
 245 250 255
 Asn Glu Ile Asp Thr Met Phe Val Asp Arg Arg Gly Thr Ala Glu Pro
 260 265 270
 Gln Gly Gln Lys Leu Val Ile Cys Cys Glu Gly Asn Ala Gly Phe Tyr
 275 280 285
 Glu Val Gly Cys Val Ser Thr Pro Leu Glu Ala Gly Tyr Ser Val Leu
 290 295 300
 Gly Trp Asn His Pro Gly Phe Ala Gly Ser Thr Gly Val Pro Phe Pro
 305 310 315 320
 Gln Asn Glu Ala Asn Ala Met Asp Val Val Val Gln Phe Ala Ile His
 325 330 335
 Arg Leu Gly Phe Gln Pro Gln Asp Ile Ile Ile Tyr Ala Trp Ser Ile

340 345 350
 Gly Gly Phe Thr Ala Thr Trp Ala Ala Met Ser Tyr Pro Asp Val Ser
 355 360 365
 Ala Met Ile Leu Asp Ala Ser Phe Asp Asp Leu Val Pro Leu Ala Leu
 370 375 380
 Lys Val Met Pro Asp Ser Trp Arg Gly Leu Val Thr Arg Thr Val Arg
 385 390 395 400
 Gln His Leu Asn Leu Asn Asn Ala Glu Gln Leu Cys Arg Tyr Gln Gly
 405 410 415
 Pro Val Leu Leu Ile Arg Arg Thr Lys Asp Glu Ile Ile Thr Thr Thr
 420 425 430
 Val Pro Glu Asp Ile Met Ser Asn Arg Gly Asn Asp Leu Leu Leu Lys
 435 440 445
 Leu Leu Gln His Arg Tyr Pro Arg Val Met Ala Glu Glu Gly Leu Arg
 450 455 460
 Val Val Arg Gln Trp Leu Glu Ala Ser Ser Gln Leu Glu Glu Ala Ser
 465 470 475 480
 Ile Tyr Ser Arg Trp Glu Val Glu Glu Asp Trp Cys Leu Ser Val Leu
 485 490 495
 Arg Ser Tyr Gln Ala Glu His Gly Pro Asp Phe Pro Trp Ser Val Gly
 500 505 510
 Glu Asp Met Ser Ala Asp Gly Arg Arg Gln Leu Ala Leu Phe Leu Ala
 515 520 525
 Arg Lys His Leu His Asn Phe Glu Ala Thr His Cys Thr Pro Leu Pro
 530 535 540
 Ala Gln Asn Phe Gln Met Pro Trp His Leu
 545 550

<210> 343

<211> 225

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (5)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 343

His Glu Arg Ala Xaa Gly Pro Ser Arg Gly His Gly Glu Leu Leu Ser
 1 5 10 15

Cys Val Leu Gly Pro Arg Leu Tyr Lys Ile Tyr Arg Glu Arg Asp Ser
 20 25 30

Glu Arg Ala Pro Ala Ser Val Pro Glu Thr Pro Thr Ala Val Thr Ala
 35 40 45
 Pro His Ser Ser Ser Trp Asp Thr Tyr Tyr Gln Pro Arg Ala Leu Glu
 50 55 60
 Lys His Ala Asp Ser Ile Leu Ala Leu Ala Ser Val Phe Trp Ser Ile
 65 70 75 80
 Ser Tyr Tyr Ser Ser Pro Phe Ala Phe Phe Tyr Leu Tyr Arg Lys Gly
 85 90 95
 Tyr Leu Ser Leu Ser Lys Val Val Pro Phe Ser His Tyr Ala Gly Thr
 100 105 110
 Leu Leu Leu Leu Leu Ala Gly Val Ala Cys Ser Glu Ala Leu Ala Ala
 115 120 125
 Gly Pro Thr Pro Ser Thr Gly Ser Ser Ser Pro Ser Trp Lys Gln His
 130 135 140
 Ile Gly Thr Ser Leu Gln Lys Thr Arg Gly Ser Leu Pro Thr Thr Thr
 145 150 155 160
 Leu Thr Ser Gly Ala Gly Gln Ser Thr Ser Thr Gly Lys Asn Pro Ala
 165 170 175
 Ala Gly Arg Ser Leu Glu Gly Ala Leu Pro Ala Gly Val Trp Pro Cys
 180 185 190
 Phe Ala Gln Ser Pro Cys Thr Gly Gly Gln Gln Thr Pro Ser Ser Thr
 195 200 205
 Gly Leu Arg Ser Cys Leu Val Arg Ser Pro Ala Thr Trp Trp Arg Thr
 210 215 220
 Pro
 225

<210> 344
 <211> 299
 <212> PRT
 <213> Homo sapiens

<400> 344
 Met Phe Lys Arg His Gln Arg Leu Lys Lys Asp Ser Thr Gln Ala Glu
 1 5 10 15
 Glu Asp Leu Ser Glu Gln Glu Gln Asn Gln Leu Asn Val Leu Lys Lys
 20 25 30
 His Gly Tyr Val Val Gly Arg Val Gly Arg Thr Phe Leu Tyr Ser Glu
 35 40 45
 Glu Gln Lys Asp Asn Ile Pro Phe Glu Phe Asp Ala Asp Ser Leu Ala
 50 55 60
 Phe Asp Met Glu Asn Asp Pro Val Met Gly Thr His Lys Ser Thr Lys

65	70	75	80
Gln Val Glu Leu Thr Ala Gln Asp Val Lys Asp Ala His Trp Phe Tyr	85	90	95
Asp Thr Pro Gly Ile Thr Lys Glu Asn Cys Ile Leu Asn Leu Leu Thr	100	105	110
Glu Lys Glu Val Asn Ile Val Leu Pro Thr Gln Ser Ile Val Pro Arg	115	120	125
Thr Phe Val Leu Lys Pro Gly Met Val Leu Phe Leu Gly Ala Ile Gly	130	135	140
Arg Ile Asp Phe Leu Gln Gly Asn Gln Ser Ala Trp Phe Thr Val Val	145	150	155
Ala Ser Asn Ile Leu Pro Val His Ile Thr Ser Leu Asp Arg Ala Asp	165	170	175
Ala Leu Tyr Gln Lys His Ala Gly His Thr Leu Leu Gln Ile Pro Met	180	185	190
Gly Gly Lys Glu Arg Met Ala Gly Phe Pro Pro Leu Val Ala Glu Asp	195	200	205
Ile Met Leu Lys Glu Gly Leu Gly Ala Ser Glu Ala Val Ala Asp Ile	210	215	220
Lys Phe Ser Ser Ala Gly Trp Val Ser Val Thr Pro Asn Phe Lys Asp	225	230	235
Arg Leu His Leu Arg Gly Tyr Thr Pro Glu Gly Thr Val Leu Thr Val	245	250	255
Arg Pro Pro Leu Leu Pro Tyr Ile Val Asn Ile Lys Gly Gln Arg Ile	260	265	270
Lys Lys Ser Val Ala Tyr Lys Thr Lys Lys Pro Pro Ser Leu Met Tyr	275	280	285
Asn Val Arg Lys Lys Lys Gly Lys Ile Asn Val	290	295	

<210> 345

<211> 314

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (147)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (211)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 345

Met Leu Pro Ala Arg Leu Pro Phe Arg Leu Leu Ser Leu Phe Leu Arg
 1 5 10 15
 Gly Ser Ala Pro Thr Ala Ala Arg His Gly Leu Arg Glu Pro Leu Leu
 20 25 30
 Glu Arg Arg Cys Ala Ala Ala Ser Ser Phe Gln His Ser Ser Ser Leu
 35 40 45
 Gly Arg Glu Leu Pro Tyr Asp Pro Val Asp Thr Glu Gly Phe Gly Glu
 50 55 60
 Gly Gly Asp Met Gln Glu Arg Phe Leu Phe Pro Glu Tyr Ile Leu Asp
 65 70 75 80
 Pro Glu Pro Gln Pro Thr Arg Glu Lys Gln Leu Gln Glu Leu Gln Gln
 85 90 95
 Gln Gln Glu Glu Glu Glu Arg Gln Arg Gln Gln Arg Arg Glu Glu Arg
 100 105 110
 Arg Gln Gln Asn Leu Arg Ala Arg Ser Arg Glu His Pro Val Val Gly
 115 120 125
 His Pro Asp Pro Ala Leu Pro Pro Ser Gly Val Asn Cys Ser Gly Cys
 130 135 140
 Gly Ala Xaa Leu His Cys Gln Asp Ala Gly Val Pro Gly Tyr Leu Pro
 145 150 155 160
 Arg Glu Lys Phe Leu Arg Thr Ala Glu Ala Asp Gly Gly Leu Ala Arg
 165 170 175
 Thr Val Cys Gln Arg Cys Trp Leu Leu Ser His His Arg Arg Ala Leu
 180 185 190
 Arg Leu Gln Val Ser Arg Glu Gln Tyr Leu Glu Leu Val Ser Ala Ala
 195 200 205
 Leu Arg Xaa Pro Gly Pro Ser Leu Val Leu Tyr Met Val Asp Leu Leu
 210 215 220
 Asp Leu Pro Asp Ala Leu Leu Pro Asp Leu Pro Ala Leu Val Gly Pro
 225 230 235 240
 Lys Gln Leu Ile Val Leu Gly Asn Lys Val Asp Leu Leu Pro Gln Asp
 245 250 255
 Ala Pro Gly Tyr Arg Gln Arg Leu Arg Glu Arg Leu Trp Glu Asp Cys
 260 265 270
 Ala Arg Ala Gly Leu Leu Leu Ala Pro Gly Thr Lys Gly His Ser Ala
 275 280 285
 Pro Ser Arg Thr Ser His Arg Thr Gly Arg Ile Arg Ile Arg Arg Thr
 290 295 300

Gly Pro Ala Gln Trp Ser Gly Thr Cys Gly
305 310

<210> 346

<211> 380

<212> PRT

<213> Homo sapiens

<400> 346

Pro Ser Phe Arg Arg Glu Arg Val Glu Thr Gly Gly Gly Gly Pro Val
1 5 10 15
Thr His Gly Thr Glu Gly Pro Phe Leu Pro Leu Pro Gly Gly Thr Arg
20 25 30
Met Asn Met Thr Gln Ala Arg Val Leu Val Ala Ala Val Val Gly Leu
35 40 45
Val Ala Val Leu Leu Tyr Ala Ser Ile His Lys Ile Glu Glu Gly His
50 55 60
Leu Ala Val Tyr Tyr Arg Gly Gly Ala Leu Leu Thr Ser Pro Ser Gly
65 70 75 80
Pro Gly Tyr His Ile Met Leu Pro Phe Ile Thr Thr Phe Arg Ser Val
85 90 95
Gln Thr Thr Leu Gln Thr Asp Glu Val Lys Asn Val Pro Cys Gly Thr
100 105 110
Ser Gly Gly Val Met Ile Tyr Ile Asp Arg Ile Glu Val Val Asn Met
115 120 125
Leu Ala Pro Tyr Ala Val Phe Asp Ile Val Arg Asn Tyr Thr Ala Asp
130 135 140
Tyr Asp Lys Thr Leu Ile Phe Asn Lys Ile His His Glu Leu Asn Gln
145 150 155 160
Phe Cys Ser Ala His Thr Leu Gln Glu Val Tyr Ile Glu Leu Phe Asp
165 170 175
Gln Ile Asp Glu Asn Leu Lys Gln Ala Leu Gln Lys Asp Leu Asn Leu
180 185 190
Met Ala Pro Gly Leu Thr Ile Gln Ala Val Arg Val Thr Lys Pro Lys
195 200 205
Ile Pro Glu Ala Ile Arg Arg Asn Phe Glu Leu Met Glu Ala Glu Lys
210 215 220
Thr Lys Leu Leu Ile Ala Ala Gln Lys Gln Lys Val Val Glu Lys Glu
225 230 235 240
Ala Glu Thr Glu Arg Lys Lys Ala Val Ile Glu Ala Glu Lys Ile Ala
245 250 255
Gln Val Ala Lys Ile Arg Phe Gln Gln Lys Val Met Glu Lys Glu Thr

260 265 270
 Glu Lys Arg Ile Ser Glu Ile Glu Asp Ala Ala Phe Leu Ala Arg Glu
 275 280 285
 Lys Ala Lys Ala Asp Ala Glu Tyr Tyr Ala Ala His Lys Tyr Ala Thr
 290 295 300
 Ser Asn Lys His Lys Leu Thr Pro Glu Tyr Leu Glu Leu Lys Lys Tyr
 305 310 315 320
 Gln Ala Ile Ala Ser Asn Ser Lys Ile Tyr Phe Gly Ser Asn Ile Pro
 325 330 335
 Asn Met Phe Val Asp Ser Ser Cys Ala Leu Lys Tyr Ser Asp Ile Arg
 340 345 350
 Thr Gly Arg Glu Ser Ser Leu Pro Ser Lys Glu Ala Leu Glu Pro Ser
 355 360 365
 Gly Glu Asn Val Ile Gln Asn Lys Glu Ser Thr Gly
 370 375 380

 <210> 347
 <211> 422
 <212> PRT
 <213> Homo sapiens

 <220>
 <221> SITE
 <222> (328)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <400> 347
 Trp Ser Thr Gly Asn Ala Ser Trp Glu Lys Lys Asp Asn Phe Ile Leu
 1 5 10 15
 Ser Ala Asp Phe Glu Met Met Gly Leu Gly Asn Gly Arg Arg Ser Met
 20 25 30
 Lys Ser Pro Pro Leu Val Leu Ala Ala Leu Val Ala Cys Ile Ile Val
 35 40 45
 Leu Gly Phe Asn Tyr Trp Ile Ala Ser Ser Arg Ser Val Asp Leu Gln
 50 55 60
 Thr Arg Ile Met Glu Leu Glu Gly Arg Val Arg Arg Arg Ala Ala Glu
 65 70 75 80
 Arg Gly Ala Val Glu Leu Lys Lys Asn Glu Phe Gln Gly Glu Leu Glu
 85 90 95
 Lys Gln Arg Glu Gln Leu Asp Lys Ile Gln Ser Ser His Asn Phe Gln
 100 105 110
 Leu Glu Ser Val Asn Lys Leu Tyr Gln Asp Glu Lys Ala Val Leu Val
 115 120 125

Asn Asn Ile Thr Thr Gly Glu Arg Leu Ile Arg Val Leu Gln Asp Gln
 130 135 140
 Leu Lys Thr Leu Gln Arg Asn Tyr Gly Arg Leu Gln Gln Asp Val Leu
 145 150 155 160
 Gln Phe Gln Lys Asn Gln Thr Asn Leu Glu Arg Lys Phe Ser Tyr Asp
 165 170 175
 Leu Ser Gln Cys Ile Asn Gln Met Lys Glu Val Lys Glu Gln Cys Glu
 180 185 190
 Glu Arg Ile Glu Glu Val Thr Lys Lys Gly Asn Glu Ala Val Ala Ser
 195 200 205
 Arg Asp Leu Ser Glu Asn Asn Asp Gln Arg Gln Gln Leu Gln Ala Leu
 210 215 220
 Ser Glu Pro Gln Pro Arg Leu Gln Ala Ala Gly Leu Pro His Thr Glu
 225 230 235 240
 Val Pro Gln Gly Lys Gly Asn Val Leu Gly Asn Ser Lys Ser Gln Thr
 245 250 255
 Pro Ala Pro Ser Ser Glu Val Val Leu Asp Ser Lys Arg Gln Val Glu
 260 265 270
 Lys Glu Glu Thr Asn Glu Ile Gln Val Val Asn Glu Glu Pro Gln Arg
 275 280 285
 Asp Arg Leu Pro Gln Glu Pro Gly Arg Glu Gln Val Val Glu Asp Arg
 290 295 300
 Pro Val Gly Gly Arg Gly Phe Gly Gly Ala Gly Glu Leu Gly Gln Thr
 305 310 315 320
 Pro Gln Val Gln Ala Ala Leu Xaa Val Ser Gln Glu Asn Pro Glu Met
 325 330 335
 Glu Gly Pro Glu Arg Asp Gln Leu Val Ile Pro Asp Gly Gln Glu Glu
 340 345 350
 Glu Gln Glu Ala Ala Gly Glu Gly Arg Asn Gln Gln Lys Leu Arg Gly
 355 360 365
 Glu Asp Asp Tyr Asn Met Asp Glu Asn Glu Ala Glu Ser Glu Thr Asp
 370 375 380
 Lys Gln Ala Ala Leu Ala Gly Asn Asp Arg Asn Ile Asp Val Phe Asn
 385 390 395 400
 Val Glu Asp Gln Lys Arg Asp Thr Ile Asn Leu Leu Asp Gln Arg Glu
 405 410 415
 Lys Arg Asn His Thr Leu
 420

<210> 348

<211> 14
<212> PRT
<213> Homo sapiens

<400> 348
Ser Leu His Arg Phe Val Leu Ser Gln Ala Lys Asp Glu Leu
1 5 10

<210> 349
<211> 19
<212> PRT
<213> Homo sapiens

<400> 349
Phe Ile Lys Phe Phe Ala Pro Trp Cys Gly His Cys Lys Ala Leu Ala
1 5 10 15

Pro Thr Trp

<210> 350
<211> 19
<212> PRT
<213> Homo sapiens

<400> 350
Phe Ile Lys Phe Tyr Ala Pro Trp Cys Gly His Cys Lys Thr Leu Ala
1 5 10 15

Pro Thr Trp

<210> 351
<211> 363
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 351
Arg Arg Gly Arg Gly Val Pro Gly Pro Arg Gly Arg Arg Arg Leu Trp
1 5 10 15

Ser Ala Ala Cys Gly His Cys Gln Arg Leu Gln Pro Thr Trp Asn Asp
20 25 30

Leu Gly Asp Lys Tyr Asn Ser Met Glu Xaa Ala Lys Val Tyr Val Ala
35 40 45

Lys Val Asp Cys Thr Ala His Ser Asp Val Cys Ser Ala Gln Gly Val
50 55 60

Arg Gly Tyr Pro Thr Leu Lys Leu Phe Lys Pro Gly Gln Glu Ala Val

65		70		75		80
Lys Tyr Gln Gly Pro Arg Asp Phe Gln Thr Leu Glu Asn Trp Met Leu						
	85			90		95
Gln Thr Leu Asn Glu Glu Pro Val Thr Pro Glu Pro Glu Val Glu Pro						
	100		105		110	
Pro Ser Ala Pro Glu Leu Lys Gln Gly Leu Tyr Glu Leu Ser Ala Ser						
	115		120		125	
Asn Phe Glu Leu His Val Ala Gln Gly Asp His Phe Ile Lys Phe Phe						
	130		135		140	
Ala Pro Trp Cys Gly His Cys Lys Ala Leu Ala Pro Thr Trp Glu Gln						
	145		150		155	160
Leu Ala Leu Gly Leu Glu His Ser Glu Thr Val Lys Ile Gly Lys Val						
	165		170		175	
Asp Cys Thr Gln His Tyr Glu Leu Cys Ser Gly Asn Gln Val Arg Gly						
	180		185		190	
Tyr Pro Thr Leu Leu Trp Phe Arg Asp Gly Lys Lys Val Asp Gln Tyr						
	195		200		205	
Lys Gly Lys Arg Asp Leu Glu Ser Leu Arg Glu Tyr Val Glu Ser Gln						
	210		215		220	
Leu Gln Arg Thr Glu Thr Gly Ala Thr Glu Thr Val Thr Pro Ser Glu						
	225		230		235	240
Ala Pro Val Leu Ala Ala Glu Pro Glu Ala Asp Lys Gly Thr Val Leu						
	245		250		255	
Ala Leu Thr Glu Asn Asn Phe Asp Asp Thr Ile Ala Glu Gly Ile Thr						
	260		265		270	
Phe Ile Lys Phe Tyr Ala Pro Trp Cys Gly His Cys Lys Thr Leu Ala						
	275		280		285	
Pro Thr Trp Glu Glu Leu Ser Lys Lys Glu Phe Pro Gly Leu Ala Gly						
	290		295		300	
Val Lys Ile Ala Glu Val Asp Cys Thr Ala Glu Arg Asn Ile Cys Ser						
	305		310		315	320
Lys Tyr Ser Val Arg Gly Tyr Pro Thr Leu Leu Leu Phe Arg Gly Gly						
	325		330		335	
Lys Lys Val Ser Glu His Ser Gly Gly Arg Asp Leu Asp Ser Leu His						
	340		345		350	
Arg Phe Val Leu Ser Gln Ala Lys Asp Glu Leu						
	355		360			

<210> 352

<211> 93

<212> PRT

<213> Homo sapiens

<400> 352

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Met Arg Pro Gln Gly Pro Ala Ala Ser Pro Gln Arg Leu Arg Gly Leu
 1             5             10             15
Leu Leu Leu Leu Leu Leu Gln Leu Pro Ala Pro Ser Ser Ala Ser Glu
          20             25             30
Ile Pro Lys Gly Lys Gln Lys Ala His Ser Gly Arg Gly Arg Trp Trp
      35             40             45
Thr Cys Ile Met Glu Cys Ala Tyr Lys Gly Gln Gln Glu Cys Leu Val
      50             55             60
Glu Thr Gly Ala Leu Gly Pro Met Ala Phe Arg Val His Leu Gly Ser
      65             70             75             80
Gln Val Gly Met Asp Ser Lys Glu Lys Arg Gly Asn Val
          85             90

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<210> 353

<211> 273

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (210)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 353

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Glu Thr Arg Val Lys Thr Ser Leu Glu Leu Leu Arg Thr Gln Leu Glu
 1             5             10             15
Pro Thr Gly Thr Val Gly Asn Thr Ile Met Thr Ser Gln Pro Val Pro
      20             25             30
Asn Glu Thr Ile Ile Val Leu Pro Ser Asn Val Ile Asn Phe Ser Gln
      35             40             45
Ala Glu Lys Pro Glu Pro Thr Asn Gln Gly Gln Asp Ser Leu Lys Lys
      50             55             60
His Leu His Ala Glu Ile Lys Val Ile Gly Thr Ile Gln Ile Leu Cys
      65             70             75             80
Gly Met Met Val Leu Ser Leu Gly Ile Ile Leu Ala Ser Ala Ser Phe
          85             90             95
Ser Pro Asn Phe Thr Gln Val Thr Ser Thr Leu Leu Asn Ser Ala Tyr
          100             105             110
Pro Phe Ile Gly Pro Phe Phe Phe Ile Ile Ser Gly Ser Leu Ser Ile
          115             120             125
Ala Thr Glu Lys Arg Leu Thr Lys Leu Leu Val His Ser Ser Leu Val

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130 135 140
 Gly Ser Ile Leu Ser Ala Leu Ser Ala Leu Val Gly Phe Ile Ile Leu
 145 150 155 160
 Ser Val Lys Gln Ala Thr Leu Asn Pro Ala Ser Leu Gln Cys Glu Leu
 165 170 175
 Asp Lys Asn Asn Ile Pro Thr Arg Ser Tyr Val Ser Tyr Phe Tyr His
 180 185 190
 Asp Ser Leu Tyr Thr Thr Asp Cys Tyr Thr Ala Lys Ala Ser Leu Ala
 195 200 205
 Gly Xaa Leu Ser Leu Met Leu Ile Cys Thr Leu Leu Glu Phe Cys Leu
 210 215 220
 Ala Val Leu Thr Ala Val Leu Arg Trp Lys Gln Ala Tyr Ser Asp Phe
 225 230 235 240
 Pro Gly Ser Val Leu Phe Leu Pro His Ser Tyr Ile Gly Asn Ser Gly
 245 250 255
 Met Ser Ser Lys Met Thr His Asp Cys Gly Tyr Glu Glu Leu Leu Thr
 260 265 270
 Ser

<210> 354

<211> 192

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (129)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 354

Met Met Val Leu Ser Leu Gly Ile Ile Leu Ala Ser Ala Ser Phe Ser
 1 5 10 15

Pro Asn Phe Thr Gln Val Thr Ser Thr Leu Leu Asn Ser Ala Tyr Pro
 20 25 30

Phe Ile Gly Pro Phe Phe Phe Ile Ile Ser Gly Ser Leu Ser Ile Ala
 35 40 45

Thr Glu Lys Arg Leu Thr Lys Leu Leu Val His Ser Ser Leu Val Gly
 50 55 60

Ser Ile Leu Ser Ala Leu Ser Ala Leu Val Gly Phe Ile Ile Leu Ser
 65 70 75 80

Val Lys Gln Ala Thr Leu Asn Pro Ala Ser Leu Gln Cys Glu Leu Asp
 85 90 95

Lys Asn Asn Ile Pro Thr Arg Ser Tyr Val Ser Tyr Phe Tyr His Asp
 100 105 110
 Ser Leu Tyr Thr Thr Asp Cys Tyr Thr Ala Lys Ala Ser Leu Ala Gly
 115 120 125
 Xaa Leu Ser Leu Met Leu Ile Cys Thr Leu Leu Glu Phe Cys Leu Ala
 130 135 140
 Val Leu Thr Ala Val Leu Arg Trp Lys Gln Ala Tyr Ser Asp Phe Pro
 145 150 155 160
 Gly Ser Val Leu Phe Leu Pro His Ser Tyr Ile Gly Asn Ser Gly Met
 165 170 175
 Ser Ser Lys Met Thr His Asp Cys Gly Tyr Glu Glu Leu Leu Thr Ser
 180 185 190

<210> 355
 <211> 204
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (119)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 355
 Gly Ala Ser Cys Glu Gly Gly Gly Ala Ala Ala Arg Ala Ala Leu Gly
 1 5 10 15
 Val His Arg Ser Gln Lys Ala Leu Leu Val Phe Arg Arg Thr Leu Ser
 20 25 30
 Asn Leu Leu Tyr Met Pro Leu Leu Arg Gly Leu Leu Trp Leu Gln Val
 35 40 45
 Leu Cys Ala Gly Pro Leu His Thr Glu Ala Val Val Leu Leu Val Pro
 50 55 60
 Ser Asp Asp Gly Arg Ala Phe Leu Leu Arg Ser Arg Leu Leu His Pro
 65 70 75 80
 Glu Ala His Val Pro Pro Ala Ala Asp Arg Gly Ala Ser Leu Gln Cys
 85 90 95
 Val Leu His Gln Ala Ala Pro Lys Ser Arg Pro Arg Ser Pro Ala Ala
 100 105 110
 Gly Ala Ala Leu Leu His Xaa Pro Arg Arg Thr Gly Asp Glu Pro Cys
 115 120 125
 Arg Glu Phe His Gly Asn Gly Phe Pro Gly Pro Thr Gln Leu Thr Pro
 130 135 140

241

Gly Glu Cys Gly Leu Pro Ala Pro Ser Ser Leu Leu Gln His Ala Ser
145 150 155 160

Ala Pro Val Arg Thr Gly Ser Glu Gly Gln Val Val Gly Cys Pro Arg
165 170 175

Ala Arg Gly Glu Thr Gly Glu Gly Leu Ser Leu Ala Phe Leu Ser Ser
180 185 190

Leu Met Phe Thr Ser Arg Asn Gly Leu Val Gly Cys
195 200

<210> 356

<211> 72

<212> PRT

<213> Homo sapiens

<400> 356

Met Gly Ser Ala Ala Leu Glu Ile Leu Gly Leu Val Leu Cys Leu Val
1 5 10 15

Gly Trp Gly Gly Leu Ile Leu Ala Cys Gly Leu Pro Met Trp Gln Val
20 25 30

Thr Ala Phe Leu Asp His Asn Ile Val Thr Ala Gln Thr Thr Trp Lys
35 40 45

Gly Leu Trp Met Ser Cys Val Val Gln Ser Thr Gly Thr Cys Ser Ala
50 55 60

Lys Cys Thr Thr Arg Cys Trp Leu
65 70

<210> 357

<211> 115

<212> PRT

<213> Homo sapiens

<400> 357

Leu Lys Arg Ala Pro Pro Gly Pro Ala Leu Ala Lys Gly Leu Leu Gln
1 5 10 15

Pro Ser Ser Thr Phe Gln Ala Leu Glu Thr Asn Ile Gly Asp Gln Val
20 25 30

Arg Arg His Ser Thr Ala Val Val Ile Arg Glu Met Thr Ser Tyr Ile
35 40 45

Leu Ile Ser Phe Val Leu Leu Ile Gly Val Gly Cys Ile Glu Lys Asp
50 55 60

Gln Ser Cys Pro Val Phe Gly Gly Arg Lys Arg Leu His Leu Leu Phe
65 70 75 80

Val Gly Gly Gln Leu Arg Gln Val Arg Met Leu Arg Gly Glu Leu Ser
85 90 95

242

Cys Ala Cys Tyr Arg Pro His Val Gln Ala Leu Gln Leu Gly Gly Cys
 100 105 110

Thr Cys Phe
 115

<210> 358
 <211> 88
 <212> PRT
 <213> Homo sapiens

<400> 358
 Val Ile Lys Leu Ile Cys Pro Ala Ala Phe Pro Val Tyr Phe Gln Asp
 1 5 10 15

Met Ala Arg Gly Cys Val Cys Ser Leu Cys Ala Ser Val Cys Ile Phe
 20 25 30

Leu Ser Ser Leu Phe Pro Leu Leu Pro Ser Val His Ser Val Asn Ile
 35 40 45

Ile Ser Cys Leu Leu Leu Ser Lys Cys Phe Glu Gly Leu Glu Leu Met
 50 55 60

Cys Glu His Leu Tyr Gln Leu Ser Gln Leu His Val Leu His His Ile
 65 70 75 80

Phe Ser Tyr Leu Leu Cys Thr Pro
 85

<210> 359
 <211> 716
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (2)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (373)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (705)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 359
 Tyr Xaa Ile Pro Gly Ser Thr His Ala Ser Gly Arg Gln Arg Gly Ser
 1 5 10 15

Gly Arg Gly Glu Asp Asp Ser Gly Pro Pro Pro Ser Thr Val Ile Asn
 20 25 30

Gln Asn Glu Thr Phe Ala Asn Ile Ile Phe Lys Pro Thr Val Val Gln
 35 40 45
 Gln Ala Arg Ile Ala Gln Asn Gly Ile Leu Gly Asp Phe Ile Ile Arg
 50 55 60
 Tyr Asp Val Asn Arg Glu Gln Ser Ile Gly Asp Ile Gln Val Leu Asn
 65 70 75 80
 Gly Tyr Phe Val His Tyr Phe Ala Pro Lys Asp Leu Pro Pro Leu Pro
 85 90 95
 Lys Asn Val Val Phe Val Leu Asp Ser Ser Ala Ser Met Val Gly Thr
 100 105 110
 Lys Leu Arg Gln Thr Lys Asp Ala Leu Phe Thr Ile Leu His Asp Leu
 115 120 125
 Arg Pro Gln Asp Arg Phe Ser Ile Ile Gly Phe Ser Asn Arg Ile Lys
 130 135 140
 Val Trp Lys Asp His Leu Ile Ser Val Thr Pro Asp Ser Ile Arg Asp
 145 150 155 160
 Gly Lys Val Tyr Ile His His Met Ser Pro Thr Gly Gly Thr Asp Ile
 165 170 175
 Asn Gly Val Leu Gln Arg Ala Ile Arg Leu Leu Asn Lys Tyr Val Ala
 180 185 190
 His Ser Gly Ile Gly Asp Arg Ser Val Ser Leu Ile Val Phe Leu Thr
 195 200 205
 Asp Gly Lys Pro Thr Val Gly Glu Thr His Thr Leu Lys Ile Leu Asn
 210 215 220
 Asn Thr Arg Glu Ala Ala Arg Gly Gln Val Cys Ile Phe Thr Ile Gly
 225 230 235 240
 Ile Gly Asn Asp Val Asp Phe Arg Leu Leu Glu Lys Leu Ser Leu Glu
 245 250 255
 Asn Cys Gly Leu Thr Arg Arg Val His Glu Glu Glu Asp Ala Gly Ser
 260 265 270
 Gln Leu Ile Gly Phe Tyr Asp Glu Ile Arg Thr Pro Leu Leu Ser Asp
 275 280 285
 Ile Arg Ile Asp Tyr Pro Pro Ser Ser Val Val Gln Ala Thr Lys Thr
 290 295 300
 Leu Phe Pro Asn Tyr Phe Asn Gly Ser Glu Ile Ile Ile Ala Gly Lys
 305 310 315 320
 Leu Val Asp Arg Lys Leu Asp His Leu His Val Glu Val Thr Ala Ser
 325 330 335
 Asn Ser Lys Lys Phe Ile Ile Leu Lys Thr Asp Val Pro Val Arg Pro

340	345	350
Gln Lys Ala Gly Lys Asp Val Thr Gly Ser Pro Arg Pro Gly Gly Asp 355 360 365		
Gly Glu Gly Asp Xaa Asn His Ile Glu Arg Leu Trp Ser Tyr Leu Thr 370 375 380		
Thr Lys Glu Leu Leu Ser Ser Trp Leu Gln Ser Asp Asp Glu Pro Glu 385 390 395 400		
Lys Glu Arg Leu Arg Gln Arg Ala Gln Ala Leu Ala Val Ser Tyr Arg 405 410 415		
Phe Leu Thr Pro Phe Thr Ser Met Lys Leu Arg Gly Pro Val Pro Arg 420 425 430		
Met Asp Gly Leu Glu Glu Ala His Gly Met Ser Ala Ala Met Gly Pro 435 440 445		
Glu Pro Val Val Gln Ser Val Arg Gly Ala Gly Thr Gln Pro Gly Pro 450 455 460		
Leu Leu Lys Lys Pro Tyr Gln Pro Arg Ile Lys Ile Ser Lys Thr Ser 465 470 475 480		
Val Asp Gly Asp Pro His Phe Val Val Asp Phe Pro Leu Ser Arg Leu 485 490 495		
Thr Val Cys Phe Asn Ile Asp Gly Gln Pro Gly Asp Ile Leu Arg Leu 500 505 510		
Val Ser Asp His Arg Asp Ser Gly Val Thr Val Asn Gly Glu Leu Ile 515 520 525		
Gly Ala Pro Ala Pro Pro Asn Gly His Lys Lys Gln Arg Thr Tyr Leu 530 535 540		
Arg Thr Ile Thr Ile Leu Ile Asn Lys Pro Glu Arg Ser Tyr Leu Glu 545 550 555 560		
Ile Thr Pro Ser Arg Val Ile Leu Asp Gly Gly Asp Arg Leu Val Leu 565 570 575		
Pro Cys Asn Gln Ser Val Val Val Gly Ser Trp Gly Leu Glu Val Ser 580 585 590		
Val Ser Ala Asn Ala Asn Val Thr Val Thr Ile Gln Gly Ser Ile Ala 595 600 605		
Phe Val Ile Leu Ile His Leu Tyr Lys Lys Pro Ala Pro Phe Gln Arg 610 615 620		
His His Leu Gly Phe Tyr Ile Ala Asn Ser Glu Gly Leu Ser Ser Asn 625 630 635 640		
Cys His Gly Leu Leu Gly Gln Phe Leu Asn Gln Asp Ala Arg Leu Thr 645 650 655		

Glu Asp Pro Ala Gly Pro Ser Gln Asn Leu Thr His Pro Leu Leu Leu
660 665 670

Gln Val Gly Glu Gly Pro Glu Ala Val Leu Thr Val Lys Gly His Gln
675 680 685

Val Pro Val Val Trp Lys Gln Arg Lys Ile Tyr Asn Gly Glu Glu Gln
690 695 700

Xaa Asp Cys Trp Phe Ala Arg Asn Met Pro Pro Asn
705 710 715

<210> 360

<211> 387

<212> PRT

<213> Homo sapiens

<400> 360

Pro Arg Val Arg Ser Ile Lys Val Thr Glu Leu Lys Gly Leu Ala Asn
1 5 10 15

His Val Val Val Gly Ser Val Ser Cys Glu Thr Lys Asp Leu Phe Ala
20 25 30

Ala Leu Pro Gln Val Val Ala Val Asp Ile Asn Asp Leu Gly Thr Ile
35 40 45

Lys Leu Ser Leu Glu Val Thr Trp Ser Pro Phe Asp Lys Asp Asp Gln
50 55 60

Pro Ser Ala Ala Ser Ser Val Asn Lys Ala Ser Thr Val Thr Lys Arg
65 70 75 80

Phe Ser Thr Tyr Ser Gln Ser Pro Pro Asp Thr Pro Ser Leu Arg Glu
85 90 95

Gln Ala Phe Tyr Asn Met Leu Arg Arg Gln Glu Glu Leu Glu Asn Gly
100 105 110

Thr Ala Trp Ser Leu Ser Ser Glu Ser Ser Asp Asp Ser Ser Ser Pro
115 120 125

Gln Leu Ser Gly Thr Ala Arg His Ser Pro Ala Pro Arg Pro Leu Val
130 135 140

Gln Gln Pro Glu Pro Leu Pro Ile Gln Val Ala Phe Arg Arg Pro Glu
145 150 155 160

Thr Pro Ser Ser Gly Pro Leu Asp Glu Glu Gly Ala Val Ala Pro Val
165 170 175

Leu Ala Asn Gly His Ala Pro Tyr Ser Arg Thr Leu Ser His Ile Ser
180 185 190

Glu Ala Ser Val Asn Ala Ala Leu Ala Glu Ala Ser Val Glu Ala Val
195 200 205

Gly Pro Lys Ser Leu Ser Trp Gly Pro Ser Pro Pro Thr His Pro Ala

246

210 215 220
 Pro Thr His Gly Lys His Pro Ser Pro Val Pro Pro Ala Leu Asp Pro
 225 230 235 240
 Gly His Ser Ala Thr Ser Ser Thr Leu Gly Thr Thr Gly Ser Val Pro
 245 250 255
 Thr Ser Thr Asp Pro Ala Pro Ser Ala His Leu Asp Ser Val His Lys
 260 265 270
 Ser Thr Asp Ser Gly Pro Ser Glu Leu Pro Gly Pro Thr His Thr Thr
 275 280 285
 Thr Gly Ser Thr Tyr Ser Ala Ile Thr Thr Thr His Ser Ala Pro Ser
 290 295 300
 Pro Leu Thr His Thr Thr Thr Gly Ser Thr His Lys Pro Ile Ile Ser
 305 310 315 320
 Thr Leu Thr Thr Thr Gly Pro Thr Leu Asn Ile Ile Gly Pro Val Gln
 325 330 335
 Thr Thr Thr Ser Pro Thr His Thr Met Pro Ser Pro Ser Ser His Ser
 340 345 350
 Asn Ser Pro Gln Tyr Val Asp Phe Cys Ser Ser Val Cys Asp Asn Ile
 355 360 365
 Phe Val His Tyr Val Ile Gly Ile Phe Phe His Thr Leu Tyr Ser Ser
 370 375 380
 Lys Thr Leu
 385

<210> 361
 <211> 260
 <212> PRT
 <213> Homo sapiens

<400> 361
 Pro Arg Val Arg Ser Ile Lys Val Thr Glu Leu Lys Gly Leu Ala Asn
 1 5 10 15
 His Val Val Val Gly Ser Val Ser Cys Glu Thr Lys Asp Leu Phe Ala
 20 25 30
 Ala Leu Pro Gln Val Val Ala Val Asp Ile Asn Asp Leu Gly Thr Ile
 35 40 45
 Lys Leu Ser Leu Glu Val Thr Trp Ser Pro Phe Asp Lys Asp Asp Gln
 50 55 60
 Pro Ser Ala Ala Ser Ser Val Asn Lys Ala Ser Thr Val Thr Lys Arg
 65 70 75 80
 Phe Ser Thr Tyr Ser Gln Ser Pro Pro Asp Thr Pro Ser Leu Arg Glu
 85 90 95

Gln Ala Phe Tyr Asn Met Leu Arg Arg Gln Glu Glu Leu Glu Asn Gly
 100 105 110
 Thr Ala Trp Ser Leu Ser Ser Glu Ser Ser Asp Asp Ser Ser Ser Pro
 115 120 125
 Gln Leu Ser Gly Thr Ala Arg His Ser Pro Ala Pro Arg Pro Leu Val
 130 135 140
 Gln Gln Pro Glu Pro Leu Pro Ile Gln Val Ala Phe Arg Arg Pro Glu
 145 150 155 160
 Thr Pro Ser Ser Gly Pro Leu Asp Glu Glu Gly Ala Val Ala Pro Val
 165 170 175
 Leu Ala Asn Gly His Ala Pro Tyr Ser Arg Thr Leu Ser His Ile Ser
 180 185 190
 Glu Ala Ser Val Asn Ala Ala Leu Ala Glu Ala Ser Val Glu Ala Val
 195 200 205
 Gly Pro Lys Ser Leu Ser Trp Gly Pro Ser Pro Pro Thr His Pro Ala
 210 215 220
 Pro Thr His Gly Lys His Pro Ser Pro Val Pro Pro Ala Leu Asp Pro
 225 230 235 240
 Gly His Ser Ala Thr Ser Ser Thr Leu Gly Thr Thr Gly Ser Val Pro
 245 250 255
 Thr Ser Thr Asp
 260

<210> 362
 <211> 155
 <212> PRT
 <213> Homo sapiens

<400> 362
 Tyr Gly Cys Glu Lys Thr Thr Glu Gly Gly Arg Arg Arg Arg Arg Arg
 1 5 10 15
 Met Glu Ala Val Val Phe Val Phe Ser Leu Leu Asp Cys Cys Ala Leu
 20 25 30
 Ile Phe Leu Ser Val Tyr Phe Ile Ile Thr Leu Ser Asp Leu Glu Cys
 35 40 45
 Asp Tyr Ile Asn Ala Arg Ser Cys Cys Ser Lys Leu Asn Lys Trp Val
 50 55 60
 Ile Pro Glu Leu Ile Gly His Thr Ile Val Thr Val Leu Leu Leu Met
 65 70 75 80
 Ser Leu His Trp Phe Ile Phe Leu Leu Asn Leu Pro Val Ala Thr Trp
 85 90 95

Asn Ile Tyr Arg Tyr Ile Met Val Pro Ser Gly Asn Met Gly Val Phe
 100 105 110

Asp Pro Thr Glu Ile His Asn Arg Gly Gln Leu Lys Ser His Met Lys
 115 120 125

Glu Ala Met Ile Lys Leu Gly Phe His Leu Leu Cys Phe Phe Met Tyr
 130 135 140

Leu Tyr Ser Met Ile Leu Ala Leu Ile Asn Asp
 145 150 155

<210> 363
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 363
 Ala Arg Ala Pro Ala Pro Ser Leu Pro Pro Leu Pro Ser Pro Ala Pro
 1 5 10 15

Ala Leu Ala Pro Ala His Ser Leu Leu Gly Leu Leu Leu Gly Arg Met
 20 25 30

Ser Gly Ser Ser Leu Pro Ser Ala Leu Ala Leu Ser Leu Leu Val
 35 40 45

Ser Gly Ser Leu Leu Pro Gly Pro Gly Ala Ala Gln Asn Val Arg Val
 50 55 60

Gln Ser Gly Gln Asp Gln
 65 70

<210> 364
 <211> 56
 <212> PRT
 <213> Homo sapiens

<400> 364
 Gly Thr Ser Lys Asp Cys Val Leu Tyr Ala Phe Leu Asp Pro Gly Met
 1 5 10 15

Ala Val Pro Leu Phe Leu Tyr Ile Phe Thr Leu Leu Pro Leu Leu Pro
 20 25 30

Phe Leu Leu Ser Leu Cys Phe Ser Pro Leu Thr Val Lys Arg Ser Ser
 35 40 45

Ser Ser Glu Ser Lys Ser Ser Leu
 50 55

Applicant's or agent's file reference number	PZ031PCT	International application	Unassigned
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>260</u> line <u>N/A</u>		REC'D 18 AUG 1999 WIPO PCT
B. IDENTIFICATION OF DEPOSIT		Further deposits are identified on an additional sheet <input type="checkbox"/>
Name of depositary institution American Type Culture Collection		
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America		
Date of deposit July 27, 1998	Accession Number 203069	
C. ADDITIONAL INDICATIONS (leave blank if not applicable)		This information is continued on an additional sheet <input type="checkbox"/>
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)		
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28(4) EPC).		
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)		
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")		

For receiving Office use only
<input checked="" type="checkbox"/> This sheet was received with the international application
Authorized officer Yvette E. Simms PCT International Division

For International Bureau use only
<input checked="" type="checkbox"/> This sheet was received by the International Bureau on: 18 AUGUST 1999
Authorized officer P. Gonsky

CANADA

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

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DENMARK

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SWEDEN

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NETHERLANDS

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Applicant's or agent's file reference number	PZ031PCT	International application:	Unassigned
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>243</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit June 11, 1998	Accession Number 209965
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28(4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

For receiving Office use only	For International Bureau use only
<input checked="" type="checkbox"/> This sheet was received with the international application	<input type="checkbox"/> This sheet was received by the International Bureau on:
Authorized officer Yves Z. Schmitz PCT International Division	Authorized officer

CANADA

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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AUSTRALIA

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FINLAND

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UNITED KINGDOM

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DENMARK

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SWEDEN

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NETHERLANDS

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Applicant's or agent's file reference number	PZ031PCT	International application	Unassigned
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>249</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit June 26, 1998	Accession Number 203027
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28(4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	
For receiving Office use only	For International Bureau use only
<input checked="" type="checkbox"/> This sheet was received with the international application	<input type="checkbox"/> This sheet was received by the International Bureau on:
Authorized officer  Yvette E. Storms PCT International Division	Authorized officer

Form PCT/RO/134 (July 1992)

CANADA

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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AUSTRALIA

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FINLAND

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UNITED KINGDOM

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DENMARK

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SWEDEN

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NETHERLANDS

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Applicant's or agent's file reference number	PZ031PCT	International application	Unassigned
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>253</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit July 27, 1998	Accession Number 203071
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28(4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

<p>For receiving Office use only</p> <p><input checked="" type="checkbox"/> This sheet was received with the international application</p> <p>Authorized officer <i>Yvonne E. Simms</i> PCT International Division</p>	<p>For International Bureau use only</p> <p><input type="checkbox"/> This sheet was received by the International Bureau on:</p> <p>Authorized officer</p>
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CANADA

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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FINLAND

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SWEDEN

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NETHERLANDS

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Applicant's or agent's file reference number	PZ031PCT	International application
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>259</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit July 27, 1998	Accession Number 203070
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28(4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

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<input checked="" type="checkbox"/> This sheet was received with the international application
Authorized officer <i>Yvette E. Simms</i> PCT International Division

For International Bureau use only
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Authorized officer

CANADA

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US99/17130**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(6) : Please See Extra Sheet.

US CL : Please See Extra Sheet.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 536/23.1, 23.5; 435/69.1, 320.1, 252.3, 325, 6, 7.1; 530/350, 300, 387.1; 514/2

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

APS, DIALOG - Biotech Files

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JACOBS, K. A. et al. A Genetic Selection For Isolating cDNAs Encoding Secreted Proteins. Gene. 1997, Vol. 198, pages 289-296, see entire document.	1-23

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

A	document defining the general state of the art which is not considered to be of particular relevance	*T*	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
B	earlier document published on or after the international filing date	*X*	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
L	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*Y*	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
O	document referring to an oral disclosure, use, exhibition or other means	*A*	document member of the same patent family
P	document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search

05 OCTOBER 1999

Date of mailing of the international search report

21 OCT 1999

Name and mailing address of the ISA/US
Commissioner of Patents and Trademarks
Box PCT
Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

ELIZABETH C. KEMMERER

Telephone No. (703) 308-0196

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US99/17130

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☒ Claims Nos.: 1-23
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

Please See Extra Sheet.

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US99/17130

A. CLASSIFICATION OF SUBJECT MATTER:
IPC (6):

C12N 1/21, 5/10, 15/11, 15/12, 15/63; A61K 38/16, 38/17; C07K 14/00, 14/435, 16/00; G01N 33/50

A. CLASSIFICATION OF SUBJECT MATTER:
US CL :

536/23.1, 23.5; 435/69.1, 320.1, 252.3, 325, 6, 7.1; 530/350, 300, 387.1; 514/2

BOX I. OBSERVATIONS WHERE CLAIMS WERE FOUND UNSEARCHABLE

2. Where no meaningful search could be carried out, specifically:

All of the claims were unsearchable to the extent that they require reference to sequences from the sequence listing or an ATCC deposit. However, the specific sequence and deposit numbers were replaced in the claims with generic designators X, Y and Z. Therefore, no meaningful search of the sequences or deposits per se can be carried out by this Authority. The subject matter of the claims has been searched only to the extent possible with reference to the balance of the description.